ENGINEERING COMMITTEE

AGENDA

Committee Meeting:
Tuesday, January 12, 2021
2:00 PM (Board Room)

Calaveras County Water District
120 Toma Court (P.O. Box 608)
San Andreas, California 95249

Based on guidance from the California Governor's Office, social distancing measures are imposed, Board chamber's capacity will be limited to 8 persons during public meetings. Social distancing and cloth facemasks are required.

The following alternatives are available to members of the public to watch these meetings and provide comments to the Board before and during the meeting:

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Join on your computer or mobile app
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Phone Conference ID: 691 549 331 #

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Administration Office at (209) 754-3028. Notification in advance of the meeting will enable CCWD to make reasonable arrangements to ensure accessibility for this meeting. Any documents that are made available to the Committee before or at the meeting, not privileged or otherwise protected from disclosure, and related to agenda items, will be made available at CCWD for public review.

ORDER OF BUSINESS

CALL TO ORDER / PLEDGE OF ALLEGIANCE

1. PUBLIC COMMENT

At this time, members of the public may address the Committee on any non-agendized items. The public is encouraged to work through staff to place items on the agenda for consideration by the Committee. Comments are limited to three (3) minutes per person.

2. APPROVAL OF MINUTES: November 3, 2020

3. CAPITAL IMPROVEMENT PROJECT UPDATES

3a Water and Wastewater Capacity Fee Study
(Presented by Charles Palmer, District Engineer)

3b After Action Review – Ebbetts Pass Techite Pipeline Replacement Project
(Presented by Kevin Williams, Civil Engineer)

3c After Action Review – Ebbetts Pass Reach 1 Pipeline Replacement Project
(Present by Charles Palmer, District Engineer)

4. DEVELOPER / CONCEPT PROJECTS UPDATES

4a Hogan Oaks Units I and II Subdivision Development
(Presented by Charles Palmer, District Engineer)

5. OTHER UPDATES

5a Mid-Year Adjustments to the 2020/21 CIP Projects
(Presented by Damon Wyckoff, Director of Operations)

6. GENERAL MANAGER COMMENTS

7. DIRECTOR COMMENTS

8. FUTURE AGENDA ITEMS

9. NEXT COMMITTEE MEETING: Tuesday, March 2, 2021 at 2:00 p.m.

10. ADJOURNMENT

CALAVERAS COUNTY WATER DISTRICT
ENGINEERING COMMITTEE MEETING

MINUTES

November 3, 2020

Directors/Committee Members present:
Jeff Davidson
Russ Thomas

Staff present:

Michael Minkler	General Manager
Kate Jesus	Engineering Coordinator
Sam Singh	Senior Engineering
Bob Godwin	Senior Civil Engineer
Kevin Williams	Civil Engineer
Jared Gravette	Senior Construction Inspector
Rebecca Hitchcock	Executive Assistant/Clerk to the Board
Pat Burkhardt	Construction and Maintenance Manager
Damon Wyckoff	Director of Operations
Jessica Self	External Affairs Manager
Rebecca Callen	Director of Administrative Services

Others present:

Shawn Koorn	Associate Vice President, HDR Engineering
Judy Dean	Senior Financial Analyst, HDR Engineering
Cindy Secada	CCWD Director

CALL TO ORDER / PLEDGE OF ALLEGIANCE

Director Davidson called the meeting to order at 2:00 p.m.

1. PUBLIC COMMENT:

There was no public comment.

2. APPROVAL OF MINUTES:

The September 1, 2020 Minutes were approved as presented by a motion from Director Thomas and seconded by Director Davidson.

3. NEW BUSINESS:

3a Presentation/Discussion Regarding Update to the Capacity Fee Study

(Shawn Koorn, Associate Vice President, HDR Engineering)

Mr. Minkler introduced Shawn Koorn from HDR Engineering who is preparing capacity fee updates for the Jenny Lind and Copper Cove water systems and the La Contenta and Copper Cover sewer systems. Mr. Koorn presented the Committee with a PowerPoint showing preliminary information and providing a general update on the status of the study. Director Davidson inquired about the treatment capacity created by the District for water and sewer and future growth of the District. Mr. Koorn clarified that HDR and District staff continue to work on the correct assumptions for new and existing projects for inclusion in the final draft of the study. Director Thomas expressed concerns regarding the difference in capacity charge between Copper Cove and La Contenta. Mr. Koorn explained the difference in availability of capacity in the two areas and future policy discussions to balance the two charges. Director Davidson discussed the District's commitment to provide additional connections inside Assessment District 604 and inquired about the purchase price of the La Contenta Spray Field; Staff will follow up. HDR will continue to work with staff to fine tune the draft study and bring back to the Board for review and approval.

3b Presentation/Discussion Regarding Water Modeling and Analysis of the Jenny Lind A-B Transmission Main Replacement Project
(Sam Singh, Senior Engineering Technician)

Mr. Singh presented the Committee with a PowerPoint for the Jenny Lind A-B Transmission Main Replacement Project along Hartvickson Lane, Baldwin Street, Usher Drive, and Harding Road. The presentation included proposed project details, alignment, service area demand, and storage tank operation conditions. The Committee and staff discussed the proposed increase of volume and better pressure management. Mr. Minkler discussed the status of the project and 'design-build' approach. Staff will evaluate the construction schedule for 2021 and potential sources of funding.

4. OLD BUSINESS

4a Presentation/Discussion – Proposed Update to Standardized Fees for Residential Water Service Installations
(Damon Wyckoff, Director of Operations)

Mr. Wyckoff presented follow-up to the standard fees for installation of residential water meters and services which was discussed at the September 9th Engineering Committee Meeting. Staff feel it important to strike a balance between fixed costs and standard fees associated with water meter installations. After discussion with staff, the District would like to provide fixed costs for straight-forward work and continue to provide cost estimates for the more labor-intensive tasks. Staff proposes to present an agenda item and ordinance to the Board for adoption of standard fees as shown below:

ITEM / DESCRIPTION	FEE
Furnish & Set 5/8" Res. Meter (pre-existing 5/8" meter valve, no upsizing)	$371
Furnish & Set 1" Res. Meter (pre-existing 1" meter valve, no upsizing)	$436
Furnish & Set 1" Res. Meter & Upsize (convert pre-existing 5/8" to 1")	$943
Install New Res. Service Lateral (including Furnish & Set 1" Res. Meter)	Deposit & Review

The Committee and staff discussed the costs in relation to the Advanced Metering Infrastructure Project and Mr. Minkler clarified that the District is covering the costs for the upgraded meters. The Committee also discussed the option for the property owner to outsource the construction of the service lateral installation. Mr. Wyckoff explained that staff has looked at contractor's costs and the District's costs are comparable. Mr. Minkler stated that the amendment to the Ordinance could possibly be brought to the Board at the December meeting depending on the requirements of the posting of the notice.

5. GENERAL MANAGER COMMENTS

Mr. Minkler reported on the following activities: 1) Jenny Lind Elementary Force Main Project and proposed amendments to the MOU between CUSD and CCWD to be brought to the full Board for approval; 2) completion status of the Reach 1A Project; 3) Techite Project close to completion; 4) status of Gold Creek III Project; 5) status of the West Point and Wilseyville WWTF Consolidation Project proposal review; 6) update to the Kirby-Garner-Gabor Project and repair work; 7) Jenny Lind Pre-Treatment Project updates; 8) Copper Lift Station Project design submittal review; 9) Arnold and Copper Cove WWTF Projects updates; 10) status of the Advanced Metering Infrastructure Project and discussion of moving forward with the AMI meters District wide which will be brought to the full Board for discussion and approval.

6. DIRECTOR COMMENTS

Nothing to report.

7. FUTURE AGENDA ITEMS

Nothing to report.

8. NEXT MEETING

January 5, 2021 at 2:00 p.m.

9. ADJOURNMENT

There being no further business, the meeting adjourned at approximately 3:08 p.m.

Respectfully submitted,

_____
Kate Jesus
Engineering Coordinator

Agenda Item

DATE: January 12, 2021

TO: Engineering Committee, Calaveras County Water District
Michael Minkler, General Manager

FROM: Charles Palmer, District Engineer

RE: Presentation / Discussion Update on Water and Wastewater Capacity Fee Study for Jenny Lind, La Contenta and Copper Cove

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SUMMARY

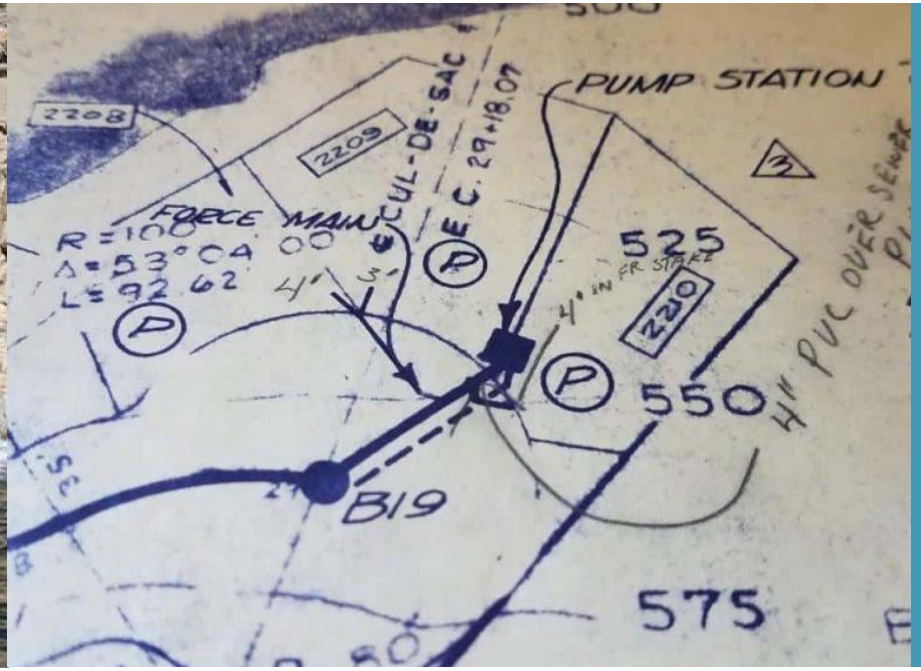
An update to the capacity fee study will be presented by Shawn Koorn, Associate Vice President, and Judy Dean, Senior Financial Analyst with HDR Engineering.

After last being presented to the Engineering Committee on November 3, 2020, CCWD and HDR worked collaboratively to review the key data and assumptions. Staff suggested revisions to the analysis to assure it correlated closely with the adopted master plans, which identify the expansion and capacity improvements needed to serve future water and wastewater customers in each service area. Also, staff reviewed and suggested revisions to the list of existing water and wastewater assets in each service area, which is necessary to assure accuracy in calculating the buy-in portion of the capacity fees. Furthermore, for the La Contenta wastewater system, capacity fees for parcels inside AD604 were evaluated to account for previously paid assessments.

FINANCIAL CONSIDERATIONS

As of November 21, 2020, a total of $24,525 has been invoiced by HDR. The approved contract amount is $57,450.00, leaving a balance of $32,925.

Attachments:
HDR Summary of Key Assumptions and Preliminary Capacity Fee Calculations



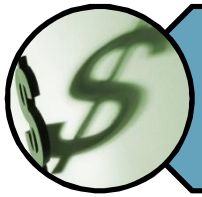
Calaveras County Water District

Water and Wastewater Capacity Charge Study

January 12, 2021

Purpose of the Presentation

Provide an Overview of Capacity Charges



Discuss Formula for Establishing Cost-Based Capacity Charges

Review the Draft Water and Sewer Capacity Charge Results

Questions / Discussion

Overview of Capacity Charges

- **A capacity charge is defined as a:**
  - Charge required of all new customers desiring water or sewer service or existing customers requiring increased service capacity
  - Charge based on the value of the utility's capacity and the amount of capacity needed by the new customer
- **Establishing cost-based capacity charges are a policy decision to have growth-pay-for-growth**
  - Charge includes a buy-in for available capacity and expansion component for future capacity needs
- **Capacity fees are restricted for use for growth related capital projects and/or growth related debt service**
  - Does not include operation and maintenance costs in calculation or fund operations and maintenance costs

Capacity Charges

Formula

- The charge is determined by bringing current assets, into current day dollars (applying cost index), plus future capital related to growth, dividing by capacity to serve, multiplying by the demand per Equivalent Single Family Unit (ESFU)

Plant Value ($) ÷ Plant Capacity (MGD)	+	Future Plant ($) ÷ Capacity to Serve (MGD)	x	Demand per ESFU (gpd)	=	Maximum Allowable Capacity Charge

- Method for Determining Plant Value:
  - Original cost, plus ENR-CCI from installment date
  - Less outstanding debt principal
- Future CIP
  - CIP Plan (Current Facility Plans)
  - Proportion to serve growth
- System Planning Criteria
  - Treatment plant capacity (MGD)
  - Water peak day demand per ESFU
  - Wastewater average day demand per ESFU

Summary of Present Water and Wastewater Capacity Charges

- Water and wastewater capacity charge last updated in 2006
- District annually updates with 20 cities average Engineering News Record, Construction Cost Index (ENR-CCI)

PRESENT AND ESTIMATED CAPACITY CHARGES			
Service Area	**Present**	**Estimated**	**$ Difference**
Water - 5/8-inch Meter			
Copper Cove	$12,302	$14,097	$1,795
Jenny Lind	$12,164	$14,881	$2,717
Sewer - Per SFDE			
Copper Cove	$12,517	$15,430	$2,913
La Contenta	$20,355	$18,968	($1,387)
La Contenta with AD 604 Adj.	$11,941	$12,130	$189

- Data assumptions:
  - ✓ Present charges as of 1/1/2020
  - ✓ Assets as of June 2020
  - ✓ ENR-CCI January 2021
  - ✓ Current Master Plan for system criteria
  - ✓ CIP projects 2017 dollars escalated to 2021 dollars
  - ✓ Growth related CIP based on District input

Capacity Charges

Water System – Planning Criteria

JENNY LIND - SYSTEM PLANNING CRITERIA			
Description		**Total**	**% Growth**
Gallons per capita per day		141.20	
Number of persons per household	×	2.41	
Average daily demand in gallons	=	340	
Peaking Factor	×	2.40	
Peak day demand in gallons per ESFU	=	817	
Plant Capacity		5.55	
Total ESFUs Service Units		**6,796**	
Existing ESFUs		3,870	56.9%
Future ESFUS		2,926	43.1%
TOTAL ESFUS		6,796	100.0%

COPPER COVE WATER SYSTEM PLANNING CRITERIA			
Description		**Total**	**% Growth**
Gallons per capita per day		173.00	
Number of persons per household	×	2.41	
Average daily demand in gallons	=	417	
Peaking Factor	×	1.70	
Peak day demand in gallons per ESFU	=	709	
Plant Capacity		4.00	
Total ESFUs Service Units		**5,642**	
Existing ESFUs		2,700	47.9%
Future ESFUS		2,942	52.1%
TOTAL ESFUS		5,642	100.0%

Capacity Charges

Jenny Lind Water – Calculations

ESTIMATED CAPACITY CHARGE			
Description	**Total**	**ESFUs**	**$/ESFU**
Existing Water System	$77,256,571	6,796	$11,369
Debt Service Credit	(1,522,736)	6,796	(224)
Future	23,941,856	6,796	3,523
Administration/Ops. Building	2,371,500	11,111	213
Net Capacity Charge	**$102,047,191**		**$14,881**
Current Capacity Charge			$12,164
$ Difference			$2,717

WATER CAPITAL IMPROVEMENT PROJECTS (CIP) 2020 - 2030						
Description	**Function**	**Total (2021 $)**	**% Capacity**	**$ Capacity**	**ESFUs**	**$/ESFU**
11092 Jenny Lind WTP Pretreatment (75% Grant)	Treatment	$5,730,777	25.0%	$1,432,694	6,796	$211
Filters 3, 4 & 5 Rehab./Coating	Treatment	746,460				
Jenny Lind Raw Water Intake Structure	Source	5,655,000	100.0%	5,655,000	6,796	832
Jenny Lind Tanks A, B, E & F Rehab	Storage	2,262,000				
Jenny Lind Tank C Replacement	Storage	735,150				
11083j Clearwell #2 Repair & Paint	Storage	244,296				
Master Plan Phase I Improv./11088 A-B Trans. Pipeline	T & D	7,584,486	100.0%	7,584,486	6,796	1,116
Master Plan Phase II Improvements	T & D	9,269,676	100.0%	9,269,676	6,796	1,364
TOTAL		**$32,227,845**		**$23,941,856**		**$3,523**

Capacity Charges

Copper Cove Water – Calculations

ESTIMATED CAPACITY CHARGE			
Description	**Total**	**ESFUs**	**$/ESFU**
Existing Water System	$60,603,739	5,642	$10,742
Future	17,723,901	0	3,142
Administration/Ops. Building	2,371,500	11,111	213
Net Capacity Charge	**$80,699,140**		**$14,097**
Current Capacity Charge			$12,302
$ Difference			$1,795

WATER CAPITAL IMPROVEMENT PROJECTS (CIP) 2020 - 2030						
Description	**Function**	**Total (2021 $)**	**% Capacity**	**$ Capacity**	**ESFUs**	**$/ESFU**
Phase I - Backup Main / Lake Tulloch Crossing	Distribution	$1,425,060				
Phase I - C4 Loop Main Project	Distribution	3,991,299	100.0%	3,991,299	5,642	708
11110 Reeds Turnpike / Phase I - Pump Station	Distribution	452,400				
11111 Tank B Pump Station Rehab.	Storage	1,029,210				
11083C Tank B1, B2, & Clearwell Rehab.	Storage	2,148,900				
Raw Water Pumping Improvements	Supply	1,131,000	100.0%	1,131,000	5,642	200
New Second Clearwell	Storage	1,131,000	100.0%	1,131,000	5,642	200
Zone B-C Pump Station	Distribution	2,262,000	100.0%	2,262,000	5,642	401
Zone B-C Trans. 20-inch Pipeline (11,800 ft)	Distribution	9,208,602	100.0%	9,208,602	5,642	1,632
TOTAL		**$22,779,471**		**$17,723,901**		$3,142

Capacity Charges

Sewer System – Planning Criteria

COPPER COVE SEWER SYSTEM PLANNING CRITERIA						
Description	Capacity (mgd)		Average Daily Dry Weather Flow (gpd/ESFU)		Total ESFUs	% Growth
Existing Flow	0.19	÷	110	=	1,769	47.5%
Future Flow	0.22	÷	110	=	1,958 ←	52.5%
Total Flow	0.41	÷	110	=	3,727	100.0%

Current permit is 0.20 mgd

LA CONTENTA SEWER SYSTEM PLANNING CRITERIA						
Description	Capacity (mgd) [1]		Average Daily Dry Weather Flow (gpd/ESFU)		Total ESFUs	% Growth
Existing Flow	0.178	÷	160	=	1,111	
Future Flow	0.102	÷	160	=	639 ←	36.5%
Total Flow	0.280				1,750	
Expansion	0.117	÷	160		729 ←	
Buildout	0.397				2,479	

Total growth = 0.22 mgd (0.102 + 0.117) or 1,368 ESFUs (639 + 729)

Capacity Charges

Copper Cove Sewer – Calculations

ESTIMATED CAPACITY CHARGE			
Description	**Total**	**ESFUs**	**$/ESFU**
Existing Sewer System	$36,579,275	3,727	$9,813
Future	10,581,387	1,958	5,404
Administration/Ops. Building	2,371,500	11,111	213
Net Capacity Charge	**$49,532,162**		**$15,430**
Current Capacity Charge			$12,517
$ Difference			$2,913

SEWER CAPITAL IMPROVEMENT PROJECTS (CIP) 2020 - 2030						
Description	**Function**	**Total (2021 $)**	**% Capacity**	**$ Capacity**	**ESFUs**	**$/ESFU**
15094 WWTP Primary, Secondary, Tertiary & UV Improv.	Treatment	$15,726,555	52.5%	$8,262,032	1,958	$4,219
15076 Lift Stations 6, 8, & Force Main Bypass	Collection	4,130,412				
15080 Lift Station 15 & 18 Rehab/Replacement	Collection	3,003,936				
Cross Country Force Main Replacement (7,200', 10" Dia.)	Collection	2,262,000	52.5%	1,188,354	1,958	607
Lower Cross Country Lift Station Pump & Electrical Upgrad	Collection	1,131,000	100.0%	1,131,000	1,958	578
		$26,253,903		**$10,581,387**		**$5,404**

Capacity Charges

La Contenta Sewer – Calculations

ESTIMATED CAPACITY CHARGE			
Description	**Total**	**ESFUs**	**$/ESFU**
Existing Sewer System (Net of Contributions)			
Assets (AD 604 Improvements)	$17,094,512	2,479	$6,896
Assets	9,038,928	2,479	3,645
Debt Service Credit	(405,687)	2,479	(164)
Future	11,458,907	1,368	8,378
Administration/Ops. Building	2,371,500	11,111	213
Net Capacity Charge	$39,558,160		$18,968
Current Capacity Charge			$20,355
$ Difference			($1,387)
Net Capacity Charge			$18,968
Inside AD 604 Adjustment	($17,094,512)	2,479	(6,838)
Net Capacity Charge with Inside AD 604 Adjustment			$12,130
Current Capacity Charge			$11,941
$ Difference			$189

SEWER CAPITAL IMPROVEMENT PROJECTS (CIP) 2020 - 2030						
Description	**Function**	**Total (2021 $)**	**% Capacity**	**$ Capacity**	**ESFUs**	**$/ESFU**
Near Term Improv. - HLS Improv. & LCWWTF Screen	Collection	$1,147,965				
Phase 1 - Activ. Sludge, Integral Clarifier & UV Disin.	Treatment	4,314,765	36.5%	1,575,321	1,368	1,152
Phase 1 - Seasonal Storage and Disposal	Treatment	3,460,860	36.5%	1,263,560	1,368	924
Asset - Land Spray Field Parcels	Treatment	691,716	100.0%	691,716	1,368	506
Buildout - 2nd Active Sludge Train & Clarifier	Treatment	4,976,400	100.0%	4,976,400	1,368	3,638
Buildout - Collection and Conveyance System	Collection	1,131,000	100.0%	1,131,000	1,368	827
Buildout - Seasonal Storage & Disposal	Treatment	1,820,910	100.0%	1,820,910	1,368	1,331
		$17,543,616		**$11,458,907**		**$8,378**

Summary of the Water and Wastewater Capacity Charge Study

- Capacity charge analysis establishes the reasonable relationship between the impact of development and the charge to be imposed
- Updated charges reflect the District's current costs and value of capacity
- Capacity charge should not exceed the calculated cost
  - As a matter of policy, the District may adopt a charge which is less than the full calculated costs
    - Implies a sharing of the cost of growth between existing rate payers and new development

Next Steps

- Incorporate input and direction as provided
- Develop draft written reports
- Present final capacity charge to District Board
- Implement capacity charge as directed by District Board

Thank you for your input!

Calaveras County Water District - Copper Cove Water
Exhibit 1
Summary of the Current and Estimated Capacity Charge

Meter Size	AWWA Meter Ratio [1]	Current Capacity Charge [2]	Estimated Capacity Charge [3]	$ Difference
5/8"	1.00	$12,302	$14,097	$1,795
3/4"	1.50	18,453	21,146	2,693
1"	2.50	30,755	35,244	4,489
1-1/2"	5.00	61,510	70,487	8,977
2"	8.00	98,416	112,779	14,363
3"	16.00	196,832	225,559	28,727
4"	25.00	307,550	352,436	44,886
6"	50.00	615,100	704,872	89,772

(1) AWWA meter ratio for a 5/8-inch equivalency.

(2) Current capacity charge effective 7/1/2020. 2006 Ordinance ENR/CCI annually

ENR/CCI Index April 2005	7,355.38	Capacity Charge 2005	$7,833
ENR/CCI Index Jan 2021	11,627.94	ENR/CCI Capacity Charge 2021	$12,384
Percent Increase	58.1%		

(3) Estimated capacity charge based on current assets, eligible CIP.

Calaveras County Water District - Copper Cove Water
Exhibit 2
Estimated Capacity Charge

Plant Description	Estimated Cost	Capacity (MGD) [2]		$ Cost per gallon		Peak Day Demand per ESFU (gpd) [3]		Estimated $ Cost/ESFU	*Notes*
Water System by Function[1]									
Land Parcels	$294,190	4.00	=	$0.07	X	709	=	$52	*Exhibit 3 - Note 2, 3*
Buildings	4,105,342	4.00	=	1.03	X	709	=	728	*Exhibit 3 - Note 2, 3*
Improvements	51,430,244	4.00	=	12.86	X	709	=	9,116	*Exhibit 3 - Note 2, 3*
Treatment	0	4.00	=	0.00	X	709	=	0	*Exhibit 3 - Note 2, 3*
Distribution	1,626,221	4.00	=	0.41	X	709	=	288	*Exhibit 3 - Note 2, 3*
Other Plant	3,147,743	4.00	=	0.79	X	709	=	558	*Exhibit 3 - Note 2, 3*
Total Water System	$60,603,739							$10,742	
Future [5]	$17,723,901	4.00	=	4.43	X	709	=	3,142	*Exhibit 3 - Note 2, 3, 6*
						System ESFUs			
Administration/Operations Building[6]	$1,500,000					11,111		$135	
ENR-CCI	$2,371,500					11,111		$213	
Net Total Capacity Charge	**$80,699,140**							**$14,097**	
Current Capacity Charge								**$12,302**	
$ Difference								**$1,795**	

Notes:

[1] Water system cost based on asset listing as of June 2019.

[2] 2018 Copper Cove Water System Master Plan, page 2, rated capacity of 4 mgd.

[3] Peak day demand see Exhibit 3, Note 2.

[4] No outstanding borrowing.

[5] Future plant based on 2020 to 2030 CIP. See Exhibit 3, Note 6.

[6] ENR-CCI from 2005 to 2021 = $135 X 58.1% = $213/ESFU

Calaveras County Water District - Copper Cove Water
Exhibit 3
Connection Fee - Data

NOTES:

(1) Existing Water Equivalent Single Family Units (ESFUs)

Meter Size	Capacity (gpm)	AWWA Meter Ratio	Number of Customers	Total ESFUs[(1)]
5/8"	30	1.00	2,583	2,583
1"	50	2.50	22	55
1-1/5"	100	5.00	6	30
2"	160	8.00	4	32
Total			2,615	2,700

[(1)]Total Equivalent Single Family Units based on number of customers multiplied by AWWA meter ratios.

(2) Peak Demand Per ESFU

Gallons per capita per day	173.0	(1)
Number of persons per household	2.41	(2)
Average Daily Demand in gallons	417	(3)
Peaking Factor	1.70	(4)
Peak Day demand in gallons per ESFU	709	

(1) 2018 Copper Cove Water System Master Plan, page 7, 173 gallons per person-day.
(2) 2018 Copper Cove Water System Master Plan, page 10, 2.41 residents per residential connection.
(3) 2018 Copper Cove Water System Master Plan, page 7, 417 average daily demand per connection.
(4) 2018 Copper Cove Water System Master Plan, page 6, peaking factor or 1.71.

(3) Treatment Peak Demand Per ESFU

Rated Capacity (1)	4.00	mgd
Peak Day demand in gallons per ESFU	709	
Total Buildout ERUs	5,642	

(1) 2018 Copper Cove Water System Master Plan, page 2, rated capacity of 4 mgd.

(4) Existing and Buildout ESFUs

Existing ESFUs	2,700	
Future ESFUs	2,942	52.1%
Total Buildout ESFUs	5,642	

(5) CIP

Water Capital Improvement Projects (CIP)		2017 Dollars 2020 - 2030 [1]	2021 Dollars	% Capacity Related	$ Capacity Related
Phase I - Backup Main / Lake Tulloch Submerged Crossing	Distribution	$1,260,000	$1,425,060	0.0%	0
Phase I - C4 Loop Main Project	Distribution	3,529,000	3,991,299	100.0%	3,991,299
11110 Reeds Turnpike / Phase I - Copperopolis Pump Station	Distribution	400,000	452,400	0.0%	0
11111 Tank B Pump Station Rehab.	Storage	910,000	1,029,210	0.0%	0
11083C Tank B1, B2, & Clearwell Rehab.	Storage	1,900,000	2,148,900	0.0%	0
Raw Water Pumping Improvements	Supply	1,000,000	1,131,000	100.0%	1,131,000
New Second Clearwell	Storage	1,000,000	1,131,000	100.0%	1,131,000
Zone B-C Pump Station	Distribution	2,000,000	2,262,000	100.0%	2,262,000
Zone B-C Trans. 20-inch Pipeline (11,800 ft)	Distribution	8,142,000	9,208,602	100.0%	9,208,602
		$20,141,000	$22,779,471		$17,723,901

(1) Future CIP based on 5-Year CIP plan.

ENR/CCI Index 2017	10,277.64
ENR/CCI Index Jan 2021	11,627.94
Percent Increase	13.1%

Calaveras County Water District - Copper Cove Water
Exhibit 4
Fixed Asset Listing as of June 2019

Asset	Description	Category Description	Contributed	Date Acquired	Total Cost	ENR-CCI 1/1/2021 11,628 ENR Factor	Repl. Cost	% CFC	CFC Eligible Original Cost	Replacement Cost New (ENR)
03-300-0016	Improvements Other than Buildings	Copper Cove		7/1/1981	$15,635,264	3.29	$51,430,244	100%	$15,635,264	$51,430,244
03-300-0004	Buildings	Copper Cove		7/1/1985	1,481,080	2.77	4,105,342	100%	1,481,080	4,105,342
03-300-0008	Land Parcels	Copper Cove		7/1/2002	165,413	1.78	294,190	100%	165,413	294,190
03-300-0012	Machinery & Equipment	Copper Cove		7/1/2002	1,769,870	1.78	3,147,743	100%	1,769,870	3,147,743
11-300-00007	Distribution	SCADA Development		7/1/2010	7,897	1.32	10,432	100%	7,897	10,432
11-300-00008	Distribution	SCADA Development		7/1/2010	3,076	1.32	4,064	0%	0	0
11-300-00009	Distribution	SCADA Development		7/1/2010	4,224	1.32	5,580	0%	0	0
11-500-00013	Distribution	Welded Steel Grating CC/FM		7/1/2010	11,624	1.32	15,355	50%	5,812	7,678
11-500-00018	Distribution	SCADA Development		7/1/2010	5,918	1.32	7,817	100%	5,918	7,817
11-500-00019	Distribution	SCADA Development		7/1/2010	3,677	1.32	4,858	0%	0	0
11-500-00020	Distribution	SCADA Development		7/1/2010	7,192	1.32	9,500	100%	7,192	9,500
12-300-00011	Distribution	SCADA Upgrade - CCWTP		7/1/2011	7,781	1.28	9,971	100%	7,781	9,971
14-300-00005	Distribution	Contr Cap-Saddle Crk Unit 6		7/1/2013	245,172	1.22	298,624	0%	0	0
14-300-00006	Distribution	CC Pump Stn/Trans Line Proj 11035		7/1/2013	431,872	1.22	526,028	100%	431,872	526,028
14-300-00013	Distribution	Sawmill Pump Station		7/1/2013	27,323	1.22	33,280	100%	27,323	33,280
14-500-00007	Distribution	Cont Cap-Saddle Crk Unit 6		7/1/2013	294,925	1.22	359,224	0%	0	0
15-300-00004	Distribution	2015 Polaris Ranger XP 900 Off Road Vehicle - CC		7/1/2014	14,211	1.19	16,851	100%	14,211	16,851
274	Distribution	Air Compressor -CC		7/1/2014	17,603	1.19	20,873	100%	17,603	20,873
16-500-00001	Distribution	2015 Bobcat Loader (4483)		9/15/2015	85,232	1.16	98,554	100%	85,232	98,554
16-300-00005	Distribution	Lake Tulloch Drought Emergency Project		10/7/2015	749,414	1.16	866,542	100%	749,414	866,542
17-300-00026	Distribution	Contr Cap-CC Ext 1017 Quill Rd		8/8/2016	43,500	1.12	48,924	0%	0	0
18-300-00008	Distribution	Contrib Cap-Baker Line Ext Proj 1260		9/6/2017	27,750	1.09	30,212	0%	0	0
19-300-00010	Distribution	Contr Cap-CC La Cobra Mina #2		11/28/2018	178,650	1.05	187,791	0%	0	0
19-500-00010	Distribution	Contr Cap-CC La Cobra Mina #2		11/28/2018	132,224	1.05	138,990	0%	0	0
19-300-00008	Distribution	Water Tank - CC C Tank (S/N 458555)/Compressor Tank		6/13/2019	18,139	1.03	18,696	100%	18,139	18,696
					$21,369,031		**$61,689,683**		**$20,430,021**	**$60,603,739**

FUNCTION	Total Cost	Repl. Cost	CFC Eligible Original Cost	Replacement Cost New (ENR)
Land Parcels	$165,413	$294,190	$165,413	$294,190
Buildings	1,481,080	4,105,342	1,481,080	4,105,342
Improvements Other than Buildings	15,635,264	51,430,244	15,635,264	51,430,244
Treatment	0	0	0	0
Distribution	2,317,404	2,712,164	1,378,394	1,626,221
Machinery & Equipment	1,769,870	3,147,743	1,769,870	3,147,743
TOTAL	**$21,369,031**	**$61,689,683**	**$20,430,021**	**$60,603,739**

Calaveras County Water District - Jenny Lind
Exhibit 1
Summary of the Current and Estimated Capacity Charge

Meter Size	AWWA Meter Ratio [1]	Current Capacity Charge [2]	Estimated Capacity Charge [3]	$ Difference
5/8"	1.00	$12,164	$14,881	$2,717
3/4"	1.50	18,246	22,322	4,076
1"	2.50	30,410	37,204	6,794
1-1/2"	5.00	60,820	74,407	13,587
2"	8.00	97,312	119,051	21,739
3"	16.00	194,624	238,103	43,479
4"	25.00	304,100	372,036	67,936
6"	50.00	608,200	744,072	135,872

(1) AWWA meter ratio for a 5/8-inch equivalency.

(2) Capacity charge effective 7/1/2020. 2006 Ordinance ENR/CCI annually.

ENR/CCI Index April 2005	7,355.38	Capacity Charge 2005	$8,200
ENR/CCI Index Jan 2021	11,627.94	ENR/CCI Capacity Charge 2021	$12,964
Percent Increase	58.1%		

(3) Estimated capacity charge based on current assets, eligible CIP.

Calaveras County Water District - Jenny Lind
Exhibit 2
Estimated Capacity Charge

Plant Description	Estimated Cost	Capacity (MGD) [2]		$ Cost per gallon		Peak Day Demand per ESFU (gpd) [3]		Estimated $ Cost/ESFU	*Notes*
Water System by Function[1]									
Land Parcels	$514,436	5.55	=	$0.09	X	817	=	$76	*Exhibit 3 - Note 2, 3*
Buildings	10,915,073	5.55	=	1.97	X	817	=	1,606	*Exhibit 3 - Note 2, 3*
Improvements	56,340,014	5.55	=	10.15	X	817	=	8,291	*Exhibit 3 - Note 2, 3*
Treatment	6,998,825	5.55	=	1.26	X	817	=	1,030	*Exhibit 3 - Note 2, 3*
Distribution	360,892	5.55	=	0.07	X	817	=	53	*Exhibit 3 - Note 2, 3*
Other Plant	2,127,331	5.55	=	0.38	X	817	=	313	*Exhibit 3 - Note 2, 3*
Total Water System	$77,256,571							**$11,369**	
Debt Service Credit [4]	(1,522,736)	5.55	=	(0.27)	X	817	=	(224)	*Exhibit 3 - Note 2, 3, 5*
Future [5]	$23,941,856	5.55	=	4.31	X	817	=	$3,523	*Exhibit 3 - Note 2, 3, 6*
Administration/Operations Building[6]	$1,500,000			System ESFUs =		11,111		$135	
ENR-CCI [7]	$2,371,500					11,111		$213	
Net Total Capacity Charge	**$102,047,191**							**$14,881**	
Current Capacity Charge								**$12,164**	
$ Difference								**$2,717**	

Notes:

[1] Water system cost based on asset listing as of June 2019.

[2] 2017 Jenny Lind Water Master Plan, page 1, Treatment plant capacity of 6.0 mgd. Page 3, Firm capacity of 5.55 mgd.

[3] 2017 Jenny Lind Water Master Plan, page 14, gpcd 141.2 for residential, peaking factor or 2.4.

[4] Internal borrowing will be paid off when funds are available.

[5] Future plant based on 2020 to 2030 CIP. See Exhibit 3, Note 5.

[6] Based on 2005 study of $135 per ESFU assigned to each system for Admin/Oper. Building. ($1,500,00/11,111 ESFUs = $135/ESFU)

[7] ENR-CCI from 2005 to 2021 = $135 X 58.1% = $213/ESFU

Calaveras County Water District - Jenny Lind
Exhibit 3
Connection Fee - Data

NOTES:

(1) Existing Water Equivalent Single Family Units (ESFUs)

Meter Size	Capacity (gpm)	AWWA Meter Ratio	Number of Customers	Total ESFUs[(1)]
5/8"	30	1.00	3,798	3,798
1"	50	2.50	13	33
1-1/5"	100	5.00	3	15
2"	160	8.00	3	24
Total			3,817	3,870

[(1)]Total Equivalent Single Family Units based on number of customers multiplied by AWWA meter ratios.

(2) Peak Demand Per ESFU

Gallons per capita per day	141.2	(1)
Number of persons per household	2.41	(2)
Average Daily Demand in gallons	340	
Peaking Factor	2.40	(3)
Peak Day demand in gallons per ESFU	817	

(1) 2017 Jenny Lind Water Master Plan, page 14, gpcd 141.2 for residential.
(2) 2017 Jenny Lind Water Master Plan, page 14, 2.41 capita per connection.
(3) 2017 Jenny Lind Water Master Plan, page 14, peaking factor of 2.4.

(3) Treatment Peak Demand Per ESFU

Rated Capacity	5.55	mgd	
Peak Day demand in gallons per ESFU	817		2005 3,600 ESFUs; 2025 6,300 ESFUs
Total Buildout ESFUs	6,796		

(1) 2017 Jenny Lind Water Master Plan, page 1, Treatment plant capacity of 6.0 mgd. Page 3, Firm capacity of 5.55 mgd.

(4) Existing and Buildout ESFUs

Existing ESFUs	3,870	
Future ESFUs	2,926	43.1%
Total Buildout ESFUs	6,796	

(5) Debt Service

Bond Issue	Year	Total Principal [(1)]	% Water Related	Total Water
Internal Loan		$1,522,736	100.00%	$1,522,736

(1) Internal borrowing will be paid off when funds are available.

(6) CIP

Water Capital Improvement Projects (CIP)			2017 Dollars 2020 - 2030 [1]	2021 Dollars	% Capacity Related	$ Capacity Related
11092 Jenny Lind WTP Pretreatment	Treatment	Grants 75%	$5,067,000	$5,730,777	25.0%	$1,432,694
Filters 3, 4 & 5 Rehab./Coating	Treatment	Rates	660,000	746,460	0.0%	0
Jenny Lind Raw Water Intake Structure	Source	Rates	5,000,000	5,655,000	100.0%	5,655,000
Jenny Lind Tanks A, B, E & F Rehab	Storage	Rates	2,000,000	2,262,000	0.0%	0
Jenny Lind Tank C Replacement	Storage	Rates	650,000	735,150	0.0%	0
11083j Clearwell #2 Repair & Paint	Storage	Rates	216,000	244,296	0.0%	0
Master Plan Phase I Improv./11088 A-B Trans. Pipeline	T & D	Rates	6,706,000	7,584,486	100.0%	7,584,486
Master Plan Phase II Improvements	T & D	Rates	8,196,000	9,269,676	100.0%	9,269,676
			$28,495,000	$32,227,845		$23,941,856

(1) Future CIP based on 5-Year CIP plan.

ENR/CCI Index 2017	10,277.64
ENR/CCI Index Jan 2021	11,627.94
Percent Increase	13.1%

Calaveras County Water District - Jenny Lind
Exhibit 4
Fixed Asset Listing as of June 2019

Asset	Description	Category Description	Contributed	Date Acquired	Total Cost	ENR-CCI 1/1/2021 11,628 ENR Factor	Repl. Cost	% CFC	CFC Eligible Original Cost	Replacement Cost New (ENR)
03-300-00003	Improvements	Jenny Lind		7/1/1981	$17,127,879	3.29	$56,340,014	100%	$17,127,879	$56,340,014
03-300-00013	Buildings	Jenny Lind		7/1/1989	4,332,071	2.52	10,915,073	100%	4,332,071	10,915,073
03-300-00007	Land Parcels	Jenny Lind		7/1/2002	289,250	1.78	514,436	100%	289,250	514,436
03-300-00011	Other Plant	Jenny Lind		7/1/2002	1,196,127	1.78	2,127,331	100%	1,196,127	2,127,331
	Treatment	Filter Addition		7/1/2007	3,240,000	1.46	4,728,674	100%	3,240,000	4,728,674
	Treatment	602 Tank		7/1/2006	1,011,330	1.50	1,517,143	25%	252,833	379,286
	Treatment	Dennis Pump Station		7/1/2006	476,408	1.50	714,682	100%	476,408	714,682
11-300-00011	Treatment	Ozone Destruct Units (2)		7/1/2010	8,347	1.32	11,027	100%	8,347	11,027
12-300-00002	Treatment	Ozone Generator JLWTP		7/1/2011	117,149	1.28	150,120	100%	117,149	150,120
13-300-00002	Treatment	Ozone Generator - JLWTP		7/1/2012	11,900	1.25	14,866	100%	11,900	14,866
13-300-00009	Treatment	JL Rgn Wtr Pln-Proj 11062		7/1/2012	46,441	1.25	58,015	100%	46,441	58,015
13-300-00011	Treatment	Contr Cap-Hagen Rd Wtr Ln Ext		7/1/2012	14,000	1.25	17,489	0%	0	0
14-300-00002	Other Plant	Venco Crane-Vehicle #132		7/1/2013	5,576	1.22	6,792	0%	0	0
14-300-00003	Treatment	JLWTP Clearwell		7/1/2013	156,953	1.22	191,172	100%	156,953	191,172
14-300-00004	Treatment	JL Ozone Generator		7/1/2013	130,426	1.22	158,862	100%	130,426	158,862
14-300-00008	Treatment	JL Water Trtmnt Flood Prev Proj 11068R		7/1/2013	607,877	1.22	740,406	25%	151,969	185,101
14-500-00006	Treatment	Cont Cap-JL/Ind Crk Sub Phase B		7/1/2013	196,694	1.22	239,577	0%	0	0
15-300-00001	Treatment	Construct/Install - JLWTP Clearwell		7/1/2014	43,634	1.19	51,738	100%	43,634	51,738
276	Other Plant	Tire Machine - JL Shop		8/11/2016	5,375	1.12	6,045	0%	0	0
17-300-00025	Distribution	Vista Del Lago/SR 26 Pipe Relocation #11093		10/18/2016	200,599	1.12	225,611	100%	200,599	225,611
18-300-00009	Distribution	Pipeline Replacement Proj 11066		8/31/2017	124,255	1.09	135,280	100%	124,255	135,280
18-300-00012	Treatment	JL Pressure Regulating Station Proj 11097		4/5/2018	316,944	1.05	333,161	100%	316,944	333,161
19-300-00007	Treatment	Control Panel - JL B Tank		3/8/2019	10,617	1.03	10,943	100%	10,617	10,943
19-300-00009	Treatment	Poly Tanks (2) JL D Pump Station		6/30/2019	10,846	1.03	11,179	100%	10,846	11,179
					$29,680,697		**$79,219,635**		**$28,244,647**	**$77,256,571**

	FUNCTION	Total Cost	Repl. Cost	CFC Eligible Original Cost	Replacement Cost New (ENR)
	Land Parcels	$289,250	$514,436	$289,250	$514,436
	Buildings	4,332,071	10,915,073	4,332,071	10,915,073
	Improvements	17,127,879	56,340,014	17,127,879	56,340,014
	Treatment	6,399,566	8,949,052	4,974,466	6,998,825
	Distribution	324,853	360,892	324,853	360,892
	Other Plant	1,207,078	2,140,168	1,196,127	2,127,331
	TOTAL	**$29,680,697**	**$79,219,635**	**$28,244,647**	**$77,256,571**

Calaveras County Water District - Copper Cove Sewer
Exhibit 1
Summary of the Current and Estimated Capacity Charge

Type of Structure	Weighting Factor [1]	Current Capacity Charge [2]	Estimated Capacity Charge [3]	$ Difference
Single Family Residential	1.00	$12,517	$15,430	$2,913
Accessory Dwelling	0.55	6,884	8,487	1,602
Apartment or Condo	0.55	6,884	8,487	1,602
Duplex, Triplex, Condo	0.70	8,762	10,801	2,039
Townhouse or Mobile Home	0.70	8,762	10,801	2,039
Commercial [4]	Demand table			

Notes:

(1) District weighting factor.

(2) Current capacity charge effective 7/1/2020. 2006 Ordinance ENR/CCI annually

ENR/CCI Index April 2005	7,355.38	Capacity Charge 2005	$9,317
ENR/CCI Index Jan 2021	11,627.94	ENR/CCI Capacity Charge 2021	$14,730
Percent Increase	58.1%		

(3) Estimated charge based on current assets, eligible CIP.

(4) Commercial based on District demand table.

Calaveras County Water District - Copper Cove Sewer
Exhibit 2
Estimated Capacity Charge

Plant Description	Estimated Cost	Capacity (MGD) [2]		$ Cost per gallon		Avg. Dry Weather Flow (gpd) [3]		Estimated $ Cost/ESFU	*Notes*
Sewer System by Function[1]									
Land Parcels	$6,798,624	0.41	=	$16.58	X	110	=	$1,824	*Exhibit 3 - Note 1*
Buildings	0	0.41	=	0.00	X	110	=	0	*Exhibit 3 - Note 1*
Improvements	21,372,408	0.41	=	52.13	X	110	=	5,734	*Exhibit 3 - Note 1*
Treatment	0	0.41	=	0.00	X	110	=	0	*Exhibit 3 - Note 1*
Distribution	5,890,944	0.41	=	14.37	X	110	=	1,580	*Exhibit 3 - Note 1*
Other Plant	2,517,297	0.41	=	6.14	X	110	=	675	*Exhibit 3 - Note 1*
Total Sewer System	$36,579,275							**$9,813**	
Debt Service Credit [4]	0	0.41	=	0.00	X	110	=	0	*Exhibit 3 - Note 1, 3*
Future [5]	$10,581,387	0.22	=	49.12	X	110	=	5,404	*Exhibit 3 - Note 1, 4*
						System ESFUs			
Administration/Operations Building[6]	$1,500,000					11,111		$135	
ENR-CCI	$2,371,500					11,111		$213	*Exhibit 2 - Note 6*
Net Total Capacity Charge	**$49,532,161**							**$15,430**	
Current Capacity Charge								**$12,517**	
$ Difference								**$2,913**	

Notes:

[1] Sewer system cost based on asset listing as of June 2019.

[2] 2018 Copper Cove Water System Master Plan, See Exhibit 3, Note 1.

[3] 2018 Copper Cove Water System Master Plan, See Exhibit 3, Note 1.

[4] No outstanding borrowing. See Exhibit 3, Note 3.

[5] Future plant based on 2020 to 2030 CIP. See Exhibit 3, Note 4.

[6] ENR-CCI from 2005 to 2020 = $135 X 58.1% = $213/ESFU

ENR/CCI Index April 2005	7,355.38
ENR/CCI Index Jan 2021	11,627.94
Percent Increase	58.1%

Calaveras County Water District - Copper Cove Sewer
Exhibit 3
Capacity Charge - Data

NOTES:

(1) Development of Equivalent Single Family Units (ESFUs)

Average Daily Dry weather Flow (gpd/ESFU)	110.0	[1]

	Total Gallons (mgd)	Average Daily Flow Gallons per EFSU	Total ESFUs	
Existing Flow (mgd)	0.19	110.0	1,769	
Future Flow (mgd)	0.22	110.0	1,958	52.5%
Permit Flow (mgd) [2]	0.41		3,727	

[1] 2018 Copper Cove Water System Master Plan, page 8 & 9, ADWF 110 gpd/ESFU.

[2] 2018 Copper Cove Water System Master Plan, page 1, permitted ADWF capacity of 0.23 mgd. Page 10, Buildout 0.41 mgd.

(2) ESFUs

	Total ESFUs	**Total ESFUs**
Existing ESFUs	1,770	1,770
Infill	1,196	0
Phase 1	472	472
Future Development	471	472
Total ESFUs [1]	3,909	2,714

[1] 2018 Copper Cove WW Master Plan, page 7, Service Area Projections (ESFUs)

(2) Debt Service

Bond Issue	**Year**	**Total Principal [1]**	**% Sewer Related**	**Total Sewer**
Bonds		$0	100.00%	$0

(3) CIP

Sewer Capital Improvement Projects (CIP)		**2017 Dollars 2020 - 2030 [1]**	**2021 Dollars**	**% Capacity Related**	**$ Capacity Related**
15094 WWTP Primary, Secondary, Tertiary & UV Improv.	Treatment	$13,905,000	$15,726,555	52.5%	$8,262,032
15076 Lift Stations 6, 8, & Force Main Bypass	Collection	3,652,000	4,130,412	0.0%	0
15080 Lift Station 15 & 18 Rehab/Replacement	Collection	2,656,000	3,003,936	0.0%	0
Cross Country Force Main Replacement (7,200', 10" Dia.)	Collection	2,000,000	2,262,000	52.5%	1,188,354
Lower Cross Country Lift Station Pump & Electrical Upgrades	Collection	1,000,000	1,131,000	100.0%	1,131,000
		$23,213,000	$26,253,903		$10,581,387

[1] Future CIP based on 5-Year CIP plan.

ENR/CCI Index 2017	10,277.64
ENR/CCI Index Jan 2021	11,627.94
Percent Increase	13.1%

Calaveras County Water District - Copper Cove Sewer
Exhibit 4
Fixed Asset Listing as of June 2019

Asset	Description	Category Description	Contributed	Date Acquired	Total Cost	ENR-CCI 11/1/2021 11,628 ENR Factor	Repl. Cost	% CFC	CFC Eligible Original Cost	Replacement Cost New (ENR)
03-500-00011	Improvements Other than Buildings	Copper Cove		7/1/1988	$8,306,021	2.57	$21,372,408	100%	$8,306,021	$21,372,408
03-500-00005	Buildings	Copper Cove		7/1/1960	746,475	14.11	10,533,940	0%	0	0
03-500-00016	Land Parcels	Copper Cove		7/1/2002	3,822,638	1.78	6,798,624	100%	3,822,638	6,798,624
03-500-00028	Machinery & Equipment	Copper Cove		7/1/2005	1,611,957	1.56	2,517,297	100%	1,611,957	2,517,297
	Collection	XC LS#21		7/1/2007	1,896,750	1.46	2,768,244	100%	1,896,750	2,768,244
15-500-00007	Collection	Pkr Flat LS 9/10/11(R&R) 15079		7/1/2014	493,406	1.19	585,047	100%	493,406	585,047
11-500-00013	Collection	Welded Steel Grating CC/FM		7/1/2010	11,624	1.32	15,355	50%	5,812	7,678
11-500-00017	Collection	L/S #22 Replacement Pump		7/1/2010	17,464	1.32	23,070	100%	17,464	23,070
12-500-00002	Collection	CCWWTP Irrigation Equip		7/1/2011	15,160	1.28	19,427	100%	15,160	19,427
12-500-00005	Collection	SCADA Upgrade - CCWWTP		7/1/2011	2,676	1.28	3,429	0%	0	0
14-500-00008	Collection	CC Pond 6 Exp Proj 15047		7/1/2013	196,085	1.22	238,835	100%	196,085	238,835
14-500-00010	Collection	CC L/S #22 Proj 15058		7/1/2013	21,884	1.22	26,656	100%	21,884	26,656
16-500-00011	Collection	CC L/S #22 Replacement		2/9/2016	1,516,935	1.12	1,706,083	100%	1,516,935	1,706,083
17-500-00020	Collection	Submersible Pump - Connors Main LS#40		11/30/2016	29,997	1.12	33,737	100%	29,997	33,737
18-500-00009	Collection	Land-4715 Tewa Ct Copper (067-015-003)		4/18/2018	44,930	1.05	47,229	100%	44,930	47,229
18-500-00008	Collection	Flyght 35hp Pump - CC Lower XC L/S #21		6/29/2018	30,716	1.05	32,287	100%	30,716	32,287
19-500-00009	Collection	CC WW Reclaim Permit Proj 15071		7/1/2018	383,051	1.05	402,652	100%	383,051	402,652
					$19,147,769		**$47,124,321**		**$18,392,806**	**$36,579,275**

	FUNCTION	Total Cost	Repl. Cost	CFC Eligible Original Cost	Replacement Cost New (ENR)
	Land Parcels	$3,822,638	$6,798,624	$3,822,638	$6,798,624
	Buildings	746,475	10,533,940	0	0
	Improvements Other than Buildings	8,306,021	21,372,408	8,306,021	21,372,408
	Treatment	0	0	0	0
	Collection	4,660,678	5,902,051	4,652,190	5,890,944
	Machinery & Equipment	1,611,957	2,517,297	1,611,957	2,517,297
	TOTAL	**$19,147,769**	**$47,124,321**	**$18,392,806**	**$36,579,275**

Date:1/6

Calaveras County Water District - La Contenta Sewer
Exhibit 1
Summary of the Current and Estimated Capacity Charge

Type of Structure	Weighting Factor [1]	Current Inside Capacity Charge [2]	Current Outside Capacity Charge [2]	Estimated CC with AD 604 Adj. [3]	Estimated Capacity Charge
Single Family Residential	1.00	$11,941	$20,355	$12,130	$18,968
Accessory Dwelling	0.55	6,568	11,195	6,672	10,433
Apartment or Condo	0.55	6,568	11,195	6,672	10,433
Duplex, Triplex, Condo	0.70	8,359	14,249	8,491	13,278
Townhouse or Mobile Home	0.70	8,359	14,249	8,491	13,278
Commercial [4]	Demand table				

Notes:
(1) District weighting factor.
(2) Current capacity charge effective 7/1/2020. 2006 Ordinance ENR/CCI annually
(3) AD 604 adjustment for inside customers receives credit for 1991 bond of $7.1 million for Hogan and La Contenta infrastructure .
(4) Commercial based on District demand table.

Calaveras County Water District - La Contenta Sewer
Exhibit 2
Summary of Estimated Capacity Charge

Plant Description	Estimated Cost		Capacity (MGD)[2]		$ Cost per gallon		Avg. Dry Weather Flow (gpd)[3]		Estimated $ Cost/ESFU	Notes
Sewer System by Function[1]										
Land Parcels	$2,411,220	÷	0.40	=	$6.08	X	160	=	$973	*Exhibit 3 - Note 1*
Buildings	1,144,082	÷	0.40	=	2.88	X	160	=	461	*Exhibit 3 - Note 1*
AD 604 Improvements	17,094,512	÷	0.40	=	43.09	X	160	=	6,895	*Exhibit 3 - Note 1*
Improvements Other than Buildings	3,077,024	÷	0.40	=	7.76	X	160	=	1,241	*Exhibit 3 - Note 1*
Treatment	2,542,830	÷	0.40	=	6.41	X	160	=	1,026	*Exhibit 3 - Note 1*
Collection	1,077,966	÷	0.40	=	2.72	X	160	=	435	*Exhibit 3 - Note 1*
Other Plant	594,602	÷	0.40	=	1.50	X	160	=	240	*Exhibit 3 - Note 1*
Contributed Capital	(1,808,796)	÷	0.40	=	(4.56)	X	160	=	(730)	*Exhibit 4*
Total Sewer System	$26,133,440								**$10,541**	
Debt Service Credit [4]	($405,687)	÷	0.40	=	(1.02)	X	160	=	(164)	*Exhibit 3 - Note 1, 3*
Future [5]	$11,458,907	÷	0.22	=	52.32	X	160	=	$8,378	*Exhibit 3 - Note 1, 4*
Administration/Operations Building[6]	$1,500,000	÷					11,111	=	$135	
ENR-CCI	$2,371,500	÷					11,111	=	$213	*Exhibit 2 - Note 6*
Net Total Capacity Charge	**$39,558,160**								**$18,968**	
Contributed Capital: AD 604 Adjustment [7]	$6,314,182		0.40	=	$16	X	$160	=	2,526	
ENR-CCI	$17,094,512	÷	0.40	=	42.74	X	160	=	(6,838)	*Exhibit 4 - Note 1*
Net Capacity Charge with Inside AD 604 Adjustment									**$12,130**	

Notes:

[1] Sewer system cost based on asset listing as of June 2019.

[2] 2018 La Contenta Sewer System Master Plan, See Exhibit 3, Note 1.

[3] 2018 La Contenta Sewer System Master Plan, See Exhibit 3, Note 1.

[4] Internal Loan. See Exhibit 3, Note 3.

[5] Future plant based on 2020 to 2030 CIP. See Exhibit 3, Note 4.

[6] ENR-CCI from 2005 to 2021 = $135 X 58.1% = $213/ESFU

ENR/CCI Index April 2005	7,355.38
ENR/CCI Index Jan 2021	11,627.94
Percent Increase	58.1%

[7] Includes 1991, $7.1 million bond for New Hogan and La Contenta infrastructure of $5,341,907 million escalated to 2020 ENR

ENR/CCI Index Apr 1991	4,766.00
ENR/CCI Index Jan 2021	11,627.94
Percent Increase	144.0%

Calaveras County Water District - La Contenta Sewer
Exhibit 3
Capacity Charge - Data

NOTES:

(1) Development of Equivalent Single Family Units (ESFUs)

Average Daily Dry weather Flow (gpd/ESFU)	160.0 [1]

	Total Gallons (mgd)	Average Daily Flow Gallons per EFSU	Total ESFUs	% Growth
Existing Flow (mgd)	0.178	160.0	1,111	
Future Flow (mgd)	0.102	160.0	639	36.5%
Total Flow (mgd) [2]	**0.280**		**1,750**	
Future Flow (mgd)	0.117		729	
Buildout Flow (mgd)	**0.397**	**160.0**	**2,479**	

[1] 2018 La Contenta WW Master Plan, page 10, ADWF 160 pgd/ESFU.

[2] 2018 La Contenta WW Master Plan, page 9, permits is .20 mgd, page 12, Buildout 0.40 mgd.

[3] 2018 La Contenta WW Master Plan, page 7, Table 2 Service Area Projections.

(2) ESFUs

	Total ESFUs	Total ESFUs	Total ESFUs	Future ESFU
Existing ESFUs	1,111	1,111	1,111	
Infill	216	216	0	
Phase 1	423	423	423	
Future Development	945	0	945	1,368
Total ESFUs [1]	2,695	1,750	2,479	

[1] 2018 La Contenta WW Master Plan, page 7, Service Area Projections (ESFUs)

(3) Debt Service

Bond Issue	Year	Total Principal [1]	% Sewer Related	Total Sewer
Loan Receivable from CCWD Operating Account		$405,687	100.00%	$405,687

(4) CIP

Sewer Capital Improvement Projects (CIP)		2017 Dollars 2020 - 2030 [1]	2021 Dollars	% Capacity Related	$ Capacity Related
Near Term Improvements - HLS Improvements & LCWWTF Screen	Collection	$1,015,000	$1,147,965	0.0%	$0
Phase 1 - Activated Sludge, Integral Clarifier & UV Disinfection	Treatment	3,815,000	4,314,765	36.5%	1,575,321
Phase 1 - Seasonal Storage and Disposal	Treatment	3,060,000	3,460,860	36.5%	1,263,560
Asset - Land Spray Field Parcels	Treatment	611,597	691,716	100.0%	691,716
Buildout - 2nd Active Sludge Train & Clarifier	Treatment	4,400,000	4,976,400	100.0%	4,976,400
Buildout - Collection and Conveyance System	Collection	1,000,000	1,131,000	100.0%	1,131,000
Buildout - Seasonal Storage & Disposal	Treatment	1,610,000	1,820,910	100.0%	1,820,910
		$15,511,597	$17,543,616		$11,458,907

[1] Future CIP based on 5-Year CIP plan in 2017 dollars escalated to 2020.

ENR/CCI Index 2017	10,277.64
ENR/CCI Index Jan 2021	11,627.94
Percent Increase	13.1%

Calaveras County Water District - La Contenta Sewer
Exhibit 4
Fixed Asset Listing as of June 2019

Asset	Description	Category Description	Contributed	Date Acquired	Total Cost	ENR-CCI 1/1/2021 11,628 ENR Factor	Repl. Cost	% CFC	CFC Eligible Original Cost	Replacement Cost New (ENR)
03-500-00010	AD 604 Improvements	La Contena		7/1/1986	$6,314,182	2.71	$17,094,512	100%	$6,314,182	$17,094,512
03-500-00004	Buildings	La Contena		7/1/1993	512,616	2.23	1,144,082	100%	512,616	1,144,082
03-500-00015	Land Parcels	La Contena		7/1/2002	1,007,000	1.78	1,790,966	100%	1,007,000	1,790,966
03-500-00019	Machinery & Equipment	La Contena		7/1/2003	342,302	1.74	594,602	100%	342,302	594,602
	Improvements Other than Buildings	La Contenta Lower Dam		8/29/2002	1,319,186	1.78	2,346,194	100%	1,319,186	2,346,194
	Treatment	La Contenta WWTP		11/14/2007	1,742,300	1.46	2,542,830	100%	1,742,300	2,542,830
	Land Parcels	La Contena		2/25/2020	611,597	1.01	620,254	100%	611,597	620,254
Contributed	Collection	Collection		9/17/2007	262,920	1.46	383,723	100%	262,920	383,723
Contributed	Collection	Collection		10/29/2007	66,560	1.46	97,142	100%	66,560	97,142
Contributed	Collection	Collection		4/22/2008	13,225	1.40	18,503	100%	13,225	18,503
Contributed	Collection	Collection		5/2/2008	32,562	1.40	45,557	100%	32,562	45,557
Contributed	Improvements Other than Buildings	Coll. / Lift Station		5/13/2008	522,364	1.40	730,830	100%	522,364	730,830
Contributed	Collection	Collection		5/30/2008	380,993	1.40	533,041	100%	380,993	533,041
					$13,127,807		**$27,942,236**		**$13,127,807**	**$27,942,236**

FUNCTION	Total Cost	Repl. Cost	CFC Eligible Original Cost	Replacement Cost New (ENR)
Land Parcels	$1,618,597	$2,411,220	$1,618,597	$2,411,220
Buildings	512,616	1,144,082	512,616	1,144,082
AD 604 Improvements	6,314,182	17,094,512	6,314,182	17,094,512
Improvements Other than Buildings	1,841,550	3,077,024	1,841,550	3,077,024
Treatment	1,742,300	2,542,830	1,742,300	2,542,830
Collection	756,260	1,077,966	756,260	1,077,966
Machinery & Equipment	342,302	594,602	342,302	594,602
TOTAL	**$13,127,807**	**$27,942,236**	**$13,127,807**	**$27,942,236**

Notes:
(1) Included in assets is the $7.1 million sewer portion of bonded debt in 1991 for Hogan and La Contenta infrastructure.

Asset	Description	Category Description	Contributed	Date Acquired	Total Cost	ENR Factor	Repl. Cost	% CFC	CFC Eligible Original Cost	Replacement Cost New (ENR)
	Contributed	Distribution		9/17/2007	$262,920	1.46	$383,723	100%	$262,920	$383,723
	Contributed	Distribution		10/29/2007	66,560	1.46	97,142	100%	66,560	97,142
	Contributed	Distribution		4/22/2008	13,225	1.40	18,503	100%	13,225	18,503
	Contributed	Distribution		5/2/2008	32,562	1.40	45,557	100%	32,562	45,557
	Contributed	Dust. / Lift Station		5/13/2008	522,364	1.40	730,830	100%	522,364	730,830
	Contributed	Distribution		5/30/2008	380,993	1.40	533,041	100%	380,993	533,041
					$1,278,624				$1,278,624	$1,808,796

Date:1/6

Agenda Item

DATE: January 12, 2021

TO: Engineering Committee, Calaveras County Water District
Michael Minkler, General Manager

FROM: Kevin Williams, Civil Engineer

SUBJECT: After Action Review – Ebbetts Pass Techite Water Pipeline Replacement Project, CIP 11084

SUMMARY:

This presentation will provide an after-action review and discussion of the Ebbetts Pass Techite Water Pipeline Replacement Project that was completed during the 2020 construction season. The project consisted of construction of approximately 7,000 feet of new 10-inch diameter water main on Meko Drive, Blackfoot Circle, MeWuk Drive and Big Foot Circle in the Big Trees Village subdivision in Dorrington, CA. It replaces a 14-inch diameter Techite pipeline that was installed in the 1970's and plagued staff with catastrophic line breaks annually. These line breaks caused road damage, disrupted water service, and required frequent boil water notices to customers. Staff would like to share with the Committee the project successes, the estimated condition of the existing unearthed pipeline, the successful construction sequencing of the project, required efforts by District Staff during the project, and take-aways from this project that can be used on future projects. The presentation will also include a general discussion on payment for asphalt pavement restoration, including advantages/disadvantages of payment for asphalt by the ton versus other bidding strategies. Staff has asked our General Contractor, KW Emerson to provide input on the successes and challenges on the Project.

FINANCIAL CONSIDERATIONS:

The total project cost is summarized below:

INITIAL CONSTRUCTION CONTRACT	$ 1,899,149.00
NET CONSTRUCTION CHANGE ORDERS (5.1%)	$ 97,685.20
CONSTRUCTION STAKING	$ 10,250.00
SOIL COMPACTION TESTING	$ 16,521.25

COLEMAN ENGINEERING CONTRACT	$ 194,171.18
STAFF TIME (Engineering, Operations, Inspections)	$ 151,698.73
OTHER COSTS	$ 2,672.60
TOTAL PROJECT COST	$ 2,393,999.24

Agenda Item

DATE: January 12, 2021

TO: Engineering Committee
Michael Minkler, General Manager

FROM: Charles Palmer, P.E., District Engineer

SUBJECT: Discussion Regarding / Division 3 / Ebbetts Pass
After Action Review of the Reach 1 Water Transmission Pipeline Replacement Project, CCWD CIP #11085

SUMMARY:

The District recently completed the Ebbetts Pass Water System Reach 1 Water Transmission Pipeline Replacement Project that serves communities along Hwy 4 from Forest Meadows to Hathaway Pines. This project had been contemplated over a decade ago in the FY 08-09 budget. By the creation of the District's Capital Water and Wastewater Renovation and Replacement (R&R) Program in 2013, the District has been able to move forward with major infrastructure projects such as the current Ebbetts Pass Reach 1 and the $5.3 million Reach 3A project completed in October 2017. The Reach 1 project included construction of 24,000 feet of new 12-inch ductile iron pipeline, replacement of ten (10) pressure reducing stations and other appurtenances (fire hydrants, air relief valves, etc.). It replaced an 8-inch steel water transmission main originally installed in 1965, which had reached the end of its useful life and hampered both staff and customers with water leaks annually. Mozingo Construction was awarded a contract on March 13, 2019, started construction on July 8, 2019 construction was complete as of November 5, 2020. The new 12-inch diameter water transmission pipeline is fully operational at this time and all portions of the original 1965 pipeline have been either removed or abandoned in place. Final acceptance of the new pipeline project was approved by the Board of Directors on December 9, 2020.

This item is presented to the Engineering Committee as an opportunity for an after action review of the project and discuss how the project was carried out, its successes and lessons learned for future projects. Potential areas to be reviewed include:

- Initial Planning, Cost Estimating and Funding
- Use of Capital R&R Funds
- Procurement of Engineering and Design Services Contracts
- Design Review and Alignment Alternatives
- Environmental Review, Notifications, and Circulation for Public Comments
- Initial Public Outreach
- Easements and Encroachment Permits

- Traffic Control Impacts
- Public Bids for the Construction Contract
- Construction Methods and Constructability Review
- Responsibility for Contract Requirements (construction staking, soils testing, etc.)
- Construction Management and Inspections
- Special Inspections
- Environmental Mitigation, Monitoring and Reporting
- Extra Workload on Operations Staff
- Public Outreach During Construction
- Testing, Disinfection and Bacteriological Testing
- Notification Procedures for Shutdowns

FINANCIAL CONSIDERATIONS:

The estimated total project costs starting from FY 2013-14 through FY 2020-21 are summarized below and a project report attached. Other project costs tabulated below include soil compaction testing, laboratory costs, permit fees, costs for easements and encroachments, advertising costs, and consultant costs.

INITIAL CONSTRUCTION CONTRACT	$ 6,744,390.00
NET CONSTRUCTION CHANGE ORDERS (1.3%)	$ 87,911.24
INITIAL TOPOGRAPHIC SURVEY	$ 57,345.35
KASL & ECORP CONTRACTS	$ 531,195.00
STAFF TIME (Engineering, Operations, Inspections)	$ 320,600.22
OTHER COSTS	$ 628,551.22
TOTAL PROJECT COST	$ 8,369,993.03

This project has been funded through the Water Capital R&R Fund 125 and a portion of the project (30%) is available for future development within the project limits and may be funded through available expansion funds in the Ebbetts Pass Expansion Fund 354.

Agenda Item

DATE: January 12, 2021

TO: Engineering Committee, Calaveras County Water District
Michael Minkler, General Manager

FROM: Charles Palmer, District Engineer

RE: Presentation / Discussion Jenny Lind and La Contenta Service Area, Hogan Oaks I and II Subdivision

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SUMMARY

On December 11, 2020, Debra Lewis, Planner III with the Calaveras County Planning Department forwarded the attached Initial Routing document and two maps for the Pre-Application Meeting for Hogan Oaks I and II Subdivisions in Valley Springs. The County is seeking updated and detailed comments from CCWD regarding the potential for impacts to our existing operation from the two proposed developments. Also, the County is seeking specific information regarding the potential for health hazards and/or noxious odors to affect subdivision residents as a result of the adjacent water treatment ponds and spray fields. The County has specific concerns that the site is not appropriate for the proposed level of development. Additional information is available in the attached Routing documents.

In 2018, staff completed a concept review for water and wastewater to serve Hogan Oaks I and II. At this time, staff have identified the following concerns:

- Higher probability of permit violations due to increased complaints of noxious odors, given that lots are not setback from the wastewater treatment plant property line.

- Both projects cause impacts to existing District infrastructure including major water, wastewater and recycled water pipelines and easements.

- Heavy equipment and truck traffic using Eberhardt Dr. and Harper Ln. to access the La Contenta WWTP are incompatible with residential streets in Hogan Oaks I and will likely create issues with potential homeowners.

- Close proximity of residential subdivision to the wastewater treatment plant raises concerns for site security, trespassing, vandalism and public safety.

- Operations staff does not see a concern with the disposal of effluent on the new spray field since this property will be fenced and its Tittle 22 effluent same as used on the golf course.

Written comments are due back to the County Planning Department no later than January 8, 2021, to be followed by an online meeting scheduled by the County Planning Department for January 14, 2021. CCWD staff plan to provide written comments and attend the online meeting.

FINANCIAL CONSIDERATIONS

The subject properties are within AD 604 for which funds were collected through the assessment district and then used to finance construction of water and sewer facilities to eventually serve those properties. Upon AD604 formation, the Hogan Oaks I property was zoned RR-10 and assigned 10 water and sewer units, and the Hogan Oaks II property zoned RR-5 and assigned 134 water and sewer units.

Attachments:

1) Initial Routing Pre-Application Meeting
2) Hogan Oaks Unit 1 Tentative Subdivision Map
3) Hogan Oaks Unit 2 Tentative Subdivision Map

County of Calaveras
Planning Department

Peter N. Maurer ~ Planning Director
Phone: (209) 754-6394 *Fax: (209) 754-6540*
***website:* www.co.calaveras.ca.us**

Initial Routing for Pre-Application Meeting
Hogan Oaks Units I and II Subdivision Development for Old Golden Oaks LLC
Valley Springs, California
December 11, 2020

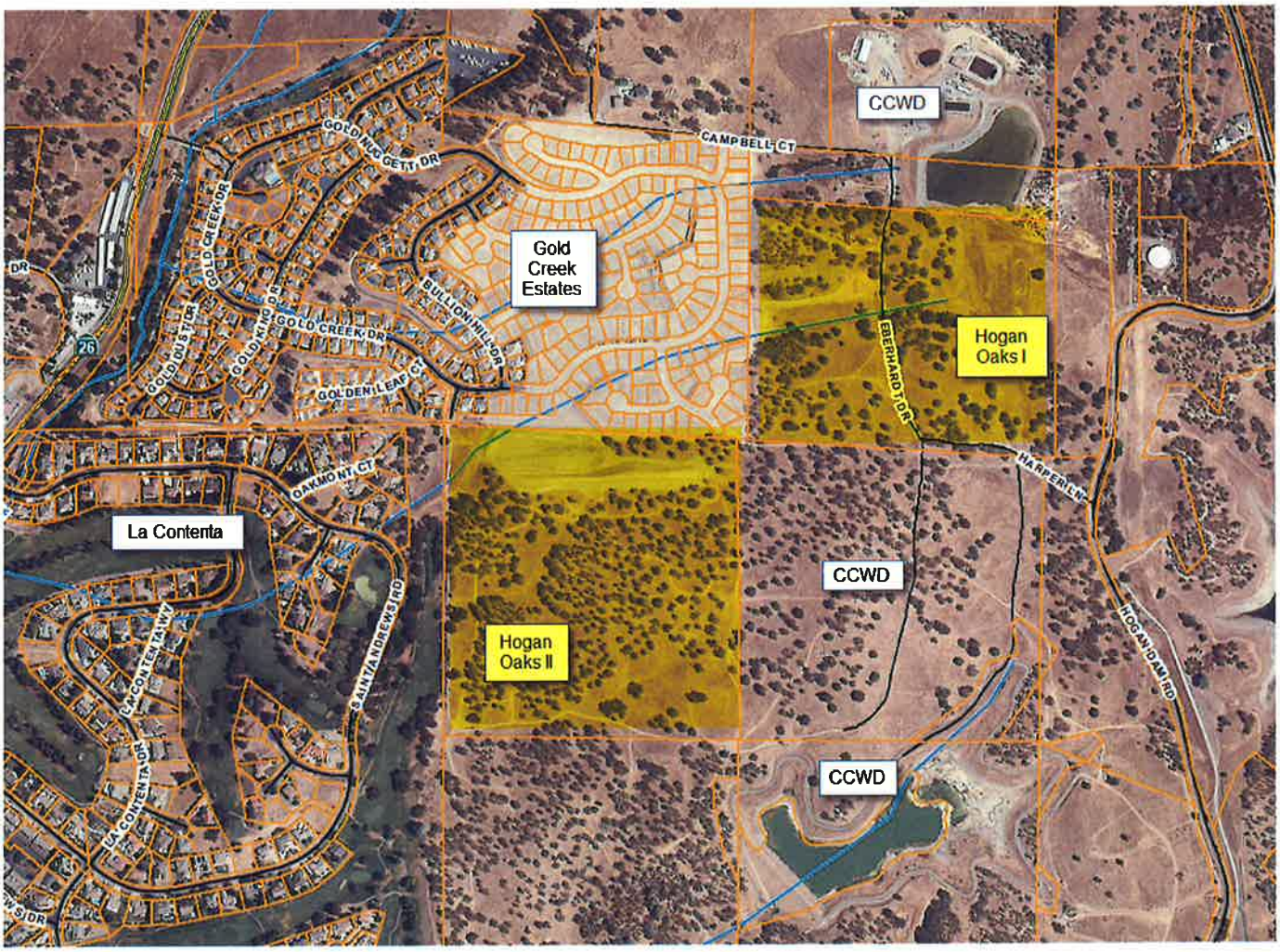
Project Description: Hogan Oaks Unit 1 is a proposed subdivision of a 33.5-acre parcel into 50 single family residential lots. This parcel has a General Plan Designation of Rural Transition A and is currently zoned Rural Residential 10-acre density. Hogan Oaks Unit 2 is a proposed subdivision of a 46.4-acre parcel into 49 single family residential lots, 72 townhouse lots, and 7.63 acres of Open Space, which will accommodate a retention pond. This parcel has a General Plan Designation of Residential Low Density and is currently zoned Rural Residential 5-acre density. The application will include a General Plan Amendment, a Zoning Amendment and a Tentative Subdivision Tract Map. Possible off-site project developments to be evaluated concurrently may include roadway and bridge improvements and water and wastewater transmission lines

Project Location: The subject properties, APN 073-042-098 (Hogan Oaks Unit I) and APN 073-042-028 (Hogan Oaks Unit II) are located in the community of Valley Springs, east of State Route 26 and west of Hogan Dam Road at Harper Lane and Eberhardt Drive. Hogan Oaks Unit I is located immediately east of Gold Creek Estates Unit 3. Hogan Oaks Unit II is located south of Gold Creek Estates Unit 3 and east of La Contenta Subdivision. The properties are bounded on the north, south and east by CCWD's Valley Springs wastewater treatment plant and spray fields. The applicant is proposing to access Hogan Oaks Unit I and Hogan Oaks Unit II by way of the existing private Gold Creek Estates Bridge and private interior subdivision road network, as well as via Hogan Dam Road to Harper Lane and Eberhard Drive. See below for Figure 1. Location Map Hogan Oaks I and II.

Project Issues to be Discussed: The pre-application meeting will discuss, but is not limited to, the following issues:

1. *Level of service and safety issues for Hogan Dam Road and the Cosgrove Creek and Spring Valley Creek bridges.*
2. *Proof of access rights through the private Gold Creek Bridge and Gold Creek Estates interior subdivision roads.*
3. *Adequacy of the modified-template Gold Creek Estates roads to support increased residential development.*
4. *Adequate access for emergency responders.*
5. *Alternative secondary access to the project.*
6. *Traffic conflicts on Harper Lane and Eberhardt Drive owing to the CCWD Wastewater Treatment Plant.*
7. *Potential for health hazards and noxious odors owing to proximity to CCWD Treatment Plant and Spray Fields.*
8. *Potential for impacts to existing CCWD infrastructure and public utility easements not yet depicted on draft subdivision maps.*
9. *Impacts to State Route 26 and relevant project intersections and the proposed scope of a traffic impact analysis.*
10. *Identification of all required off-site project improvements.*

LOCATION MAP – HOGAN OAKS I AND II



Timing: A Zoom meeting will be scheduled for the week of January 11th, 2021 to allow participants to address their concerns directly to the project applicant and agent. Alternatively, participants may submit their comments in writing for review at the pre-application meeting. Please send any written comments you may have regarding the proposed project to the Planning Department no later than Friday, January 8. 2021. If we do not receive a response by this date, we will presume that you or your agency has no initial comments, conditions, or objections that you wish to have considered during the project review process. You may contact the Planning Department at any time for the status of this project.

Debra Lewis, Planner III
dlewis@co.calaveras.ca.us (209) 754-6782

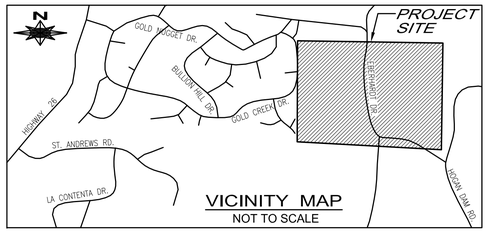
Routing with draft Site Plan Maps to:

Calaveras County Public Works
Calaveras Consolidated Fire District
Calaveras County Water District
Caltrans District 10
Sherri Lucy for Gold Creek Estates HOA
Deon Stein for Gold Creek Estates Unit I and II
Old Golden Oaks, LLC – Owner
Mary Pitto – Agent

I AM THE AGENT FOR THE OWNER OF RECORD AND CONSENT TO THE FILING OF THIS MAP IN COMPLIANCE WITH THE REQUIREMENTS OF TITLE 16 OF THE CALAVERAS COUNTY CODE AND TITLE 7, DIVISION 2 OF THE CALIFORNIA GOVERNMENT CODE.

C. RYAN VOORHEES, MANAGER
OLD GOLDEN OAKS, LLC

DATE



VESTING TENTATIVE SUBDIVISION MAP No. 2020-____

for

HOGAN OAKS UNIT 1

BEING A PORTION OF PARCEL 7 PER PM 2-146
ALSO BEING A PORTION OF THE NE 1/4 SECTION 25, T. 4 N., R. 10 E., M. D. M.
CALAVERAS COUNTY, CALIFORNIA

Scale: 1" = 100'

TOMA & ASSOCIATES INC.
ENGINEERING - SURVEYING - PLANNING
41 Summit Street, Jackson, CA 95642
(209) 223-0156

October, 2020

GENERAL NOTES AND STATEMENTS

1.	RECORD OWNER / APPLICANT:	OLD GOLDEN OAKS, LLC ATTN: RYAN VOORHEES 801 BRIARWOOD STREET WEATHERFORD, TX 76087 (209) 367.1706
2.	SURVEYOR:	TOMA and ASSOCIATES LICENSED LAND SURVEYORS 41 SUMMIT STREET JACKSON, CA 95642 (209) 223.0156
3.	DEED REFERENCE:	2006-0019226
4.	A.P.N.:	073-042-098
5.	SIZE:	33.55 ACRES
6.	ZONING:	"RR-10" (EXISTING) "R-1" (PROPOSED)
7.	GENERAL PLAN:	LA CONTENTA COMMUNITY CENTER
8.	CULTURAL SENSITIVITY:	LOW
9.	PROPOSED USE:	RESIDENTIAL
10.	WATER:	CALAVERAS COUNTY WATER DISTRICT (CCWD)
11.	SEWAGE DISPOSAL:	CALAVERAS COUNTY WATER DISTRICT (CCWD)
12.	FIRE PROTECTION:	FOOTHILL FIRE PROTECTION DISTRICT
13.	SCHOOL:	CALAVERAS UNIFIED SCHOOL DISTRICT (CUSD)
14.	UTILITIES:	POWER WILL BE SERVED BY PG and E TELEPHONE WILL BE SERVED BY AT and T
15.	EASEMENTS:	10' PUBLIC UTILITY EASEMENT WILL BE PROVIDED ADJACENT TO ALL ROADS.
16.	SETBACKS:	THERE WILL BE A FIFTEEN FOOT FRONT BUILDING SETBACK FROM ALL ROAD RIGHT-OF-WAYS, A FIVE FOOT BUILDING SETBACK FROM ALL SIDE LOT LINES AND A TEN FOOT BUILDING SETBACK FROM ALL REAR LOT LINES.
17.	PHASING:	FINAL MAPS MAY BE SUBMITTED IN MULTIPLE FILINGS.
18.	FLOOD ZONE:	THIS PROJECT IS NOT WITHIN ANY AREA SUBJECT TO FLOOD WATER INUNDATION AND IS WITHIN ZONE "X" AS SHOWN ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD RATE INSURANCE MAP FOR CALAVERAS COUNTY, CALIFORNIA, DATED MAY 16, 2017. PANEL 362 OF 750, MAP No. 06009C0362F

19. THERE ARE NO PUBLIC AREAS AND VISUALLY SENSITIVE AREAS (VSA) PROPOSED ON THIS PROJECT.
20. TOPOGRAPHIC MAPPING SHOWN HEREON IS COMPUTER GENERATED FROM SURVEYED GROUND ELEVATIONS.
21. THIS PROJECT DOES NOT LIE WITH 1000 FEET OF A MILITARY INSTALLATION OR BENEATH A FLIGHT PATH.
22. PROPOSED NEW ROADS WILL BE PRIVATE ROADS BUILT TO "PRIVATE ROAD REGIONAL/COMMUNITY" PER TEMPLATE F. ALL MATERIALS WILL BE TO APPROVED CALAVERAS COUNTY STANDARDS. A PRIVATE ROAD EASEMENT AND ROAD MAINTENANCE AGREEMENT WILL BE ENTERED INTO.

EBERHARDT DRIVE:	1060± LF	GOLD CIRCLE DRIVE:	771± LF
GRAND OAKS COURT:	657± LF	HOGAN OAKS CIRCLE:	1224± LF
HARPER LANE:	883± LF (INTX W/ HOGAN DAM RD)		
OAK LEAF COURT:	228± LF		

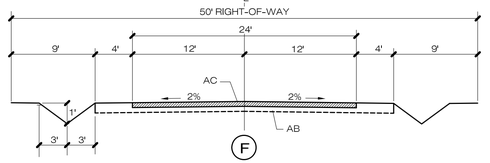
23. LAND USE SUMMARY:

TOTAL AREA:	33.58 ACRES
TOTAL LOTS:	50
SMALLEST LOT:	15,128 SF
LARGEST LOT:	69,521 SF
LAND USE:	LOTS - 28.64 ACRES (85.4%) ROADS - 4.91 ACRES (14.6%)

24. TOTAL DISTURBED AREA: 33.55 ACRES (100% OF SITE)
25. THE FOLLOWING EASEMENTS ARE NOTED IN PRELIMINARY REPORT ORDER No. _____ PREPARED BY _____ TITLE COMPANY AND DATED _____, 2020 AS AFFECTING THIS PROPERTY (SEE SAID PRELIMINARY REPORT FOR COMPLETE LIST OF EXCEPTIONS):

DEED REF	DESC
DEED REF	DESC
DEED REF	DESC
DEED REF	DESC

PRIVATE ROAD
REGIONAL / COMMUNITY



RESIDENTIAL OR LOCAL ROAD
NOT TO SCALE

REVISIONS	BY

TOMA & ASSOCIATES INC.
ENGINEERING - SURVEYING - PLANNING
41 Summit Street, Jackson, CA 95642
(209) 223-0156

VESTING TENTATIVE
SUBDIVISION MAP No. 2002-142
HOGAN OAKS UNIT 1
BEING A PORTION OF PARCEL 7 PER PM 2-146
ALSO BEING A PORTION OF THE NE 1/4 SECTION 25, T. 4 N., R. 10 E., M. D. M.
CALAVERAS COUNTY, CALIFORNIA

SITE INFORMATION:
NO SITE ADDRESS ASSIGNED
VALLEY SPRINGS, CA 95252

PREPARED FOR:
OLD GOLDEN OAKS, LLC
ATTN: RYAN VOORHEES
801 BRIARWOOD STREET
WEATHERFORD, TX 76087

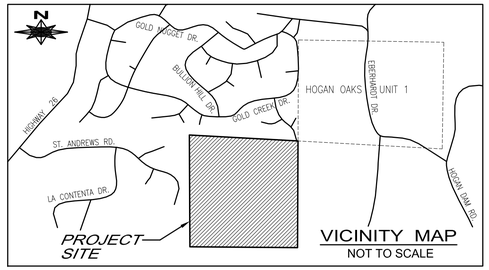
(209) 367-1706 OFFICE
(209) 329-5133 MOBILE

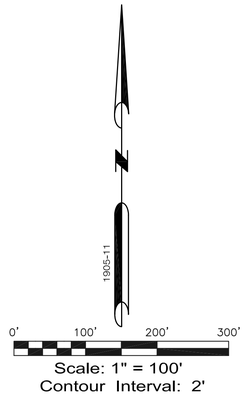
DATE: 11.03.2020
SCALE: 1"= 100'
DRAWN BY: GMW
JOB NO.: 1905-10
SHEET
1
OF 1 SHEET

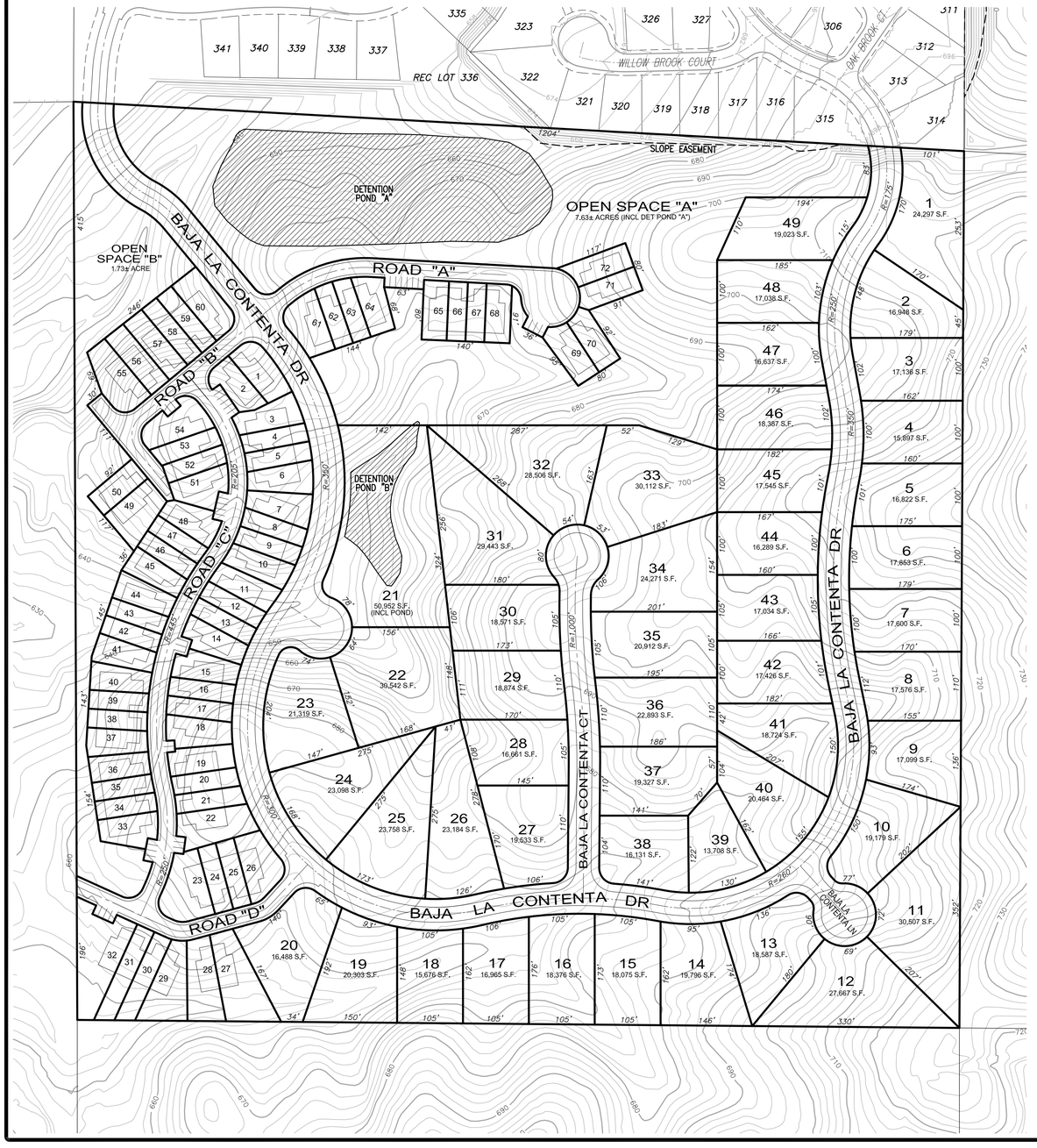
I AM THE AGENT FOR THE OWNER OF RECORD AND CONSENT TO THE FILING OF THIS MAP IN COMPLIANCE WITH THE REQUIREMENTS OF TITLE 16 OF THE CALAVERAS COUNTY CODE AND TITLE 7, DIVISION 2 OF THE CALIFORNIA GOVERNMENT CODE.

C. RYAN VOORHEES, MANAGER
OLD GOLDEN OAKS, LLC

DATE







TOWNHOUSE LOT AREA TABLE

LOT	AREA	LOT	AREA	LOT	AREA	LOT	AREA
1	4957 S.F.	22	6426 S.F.	43	2853 S.F.	64	4118 S.F.
2	4054 S.F.	23	7128 S.F.	44	3839 S.F.	65	3794 S.F.
3	4355 S.F.	24	3268 S.F.	45	3836 S.F.	66	2832 S.F.
4	3160 S.F.	25	3280 S.F.	46	2863 S.F.	67	2820 S.F.
5	3154 S.F.	26	5696 S.F.	47	2874 S.F.	68	3796 S.F.
6	4418 S.F.	27	9115 S.F.	48	4122 S.F.	69	4238 S.F.
7	4434 S.F.	28	6566 S.F.	49	5596 S.F.	70	3936 S.F.
8	3125 S.F.	29	6939 S.F.	50	3680 S.F.	71	3932 S.F.
9	3188 S.F.	30	4441 S.F.	51	4406 S.F.	72	4063 S.F.
10	4236 S.F.	31	4837 S.F.	52	3023 S.F.		
11	4198 S.F.	32	10948 S.F.	53	3229 S.F.		
12	3154 S.F.	33	4258 S.F.	54	5381 S.F.		
13	3153 S.F.	34	2913 S.F.	55	6054 S.F.		
14	4245 S.F.	35	2880 S.F.	56	4370 S.F.		
15	4220 S.F.	36	3703 S.F.	57	4333 S.F.		
16	3152 S.F.	37	3880 S.F.	58	3439 S.F.		
17	3154 S.F.	38	2842 S.F.	59	3415 S.F.		
18	4580 S.F.	39	2830 S.F.	60	5504 S.F.		
19	4227 S.F.	40	3820 S.F.	61	5287 S.F.		
20	3167 S.F.	41	3896 S.F.	62	3100 S.F.		
21	3285 S.F.	42	2860 S.F.	63	3061 S.F.		

TOWNHOUSE PARKING SUMMARY:

2 CAR GARAGE PER UNIT	144 SPACES
ON STREET GUEST PARKING	37 SPACES
TOTAL SPACES	181 SPACES (2.51 SPACES/UNIT)

VESTING
TENTATIVE SUBDIVISION MAP No. 2020-____
for
HOGAN OAKS UNIT 2

BEING PARCEL 8 PER PM 2-146
ALSO BEING A PORTION OF THE NE 1/4 SECTION 25, T. 4 N., R. 10 E., M. D. M.
CALAVERAS COUNTY, CALIFORNIA

Scale: 1" = 100'

TOMA & ASSOCIATES INC.
ENGINEERING - SURVEYING - PLANNING
41 Summit Street, Jackson, CA 95642
(209) 223-0156

April, 2020

GENERAL NOTES AND STATEMENTS

1. RECORD OWNER / APPLICANT: OLD GOLDEN OAKS, LLC
ATTN: RYAN VOORHEES
801 BRIARWOOD STREET
WEATHERFORD, TX 76087
(209) 367.1706
2. SURVEYOR: TOMA and ASSOCIATES
LICENSED LAND SURVEYORS
41 SUMMIT STREET
JACKSON, CA 95642
(209) 223.0156
3. DEED REFERENCE: 2006-0019226
4. A.P.N.: 073-042-028
5. SIZE: 46.40 ACRES
6. ZONING: "RR-10" (EXISTING) "R-1" (PROPOSED) AND "R-3 PD" (PROPOSED) AND REC/OPEN (PROPOSED)
7. GENERAL PLAN: LA CONTENTA COMMUNITY CENTER
8. CULTURAL SENSITIVITY: LOW
9. PROPOSED USE: SINGLE FAMILY RESIDENTIAL AND MULTI-FAMILY RESIDENTIAL
10. WATER: CALAVERAS COUNTY WATER DISTRICT (CCWD)
11. SEWAGE DISPOSAL: CALAVERAS COUNTY WATER DISTRICT (CCWD)
12. FIRE PROTECTION: FOOTHILL FIRE PROTECTION DISTRICT
13. SCHOOL: CALAVERAS UNIFIED SCHOOL DISTRICT (CUSD)
14. UTILITIES: POWER WILL BE SERVED BY PG and E
TELEPHONE WILL BE SERVED BY AT and T
15. EASEMENTS: 10' PUBLIC UTILITY EASEMENT WILL BE PROVIDED ADJACENT TO ALL ROADS.
16. SETBACKS: THERE WILL BE A FIFTEEN FOOT FRONT BUILDING SETBACK FROM ALL ROAD RIGHT-OF-WAYS, A FIVE FOOT BUILDING SETBACK FROM ALL SIDE LOT LINES AND A TEN FOOT BUILDING SETBACK FROM ALL REAR LOT LINES.
17. PHASING: FINAL MAPS MAY BE SUBMITTED IN MULTIPLE FILINGS.
18. FLOOD ZONE: THIS PROJECT IS NOT WITHIN ANY AREA SUBJECT TO FLOOD WATER INUNDATION AND IS WITHIN ZONE "X" AS SHOWN ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD RATE INSURANCE MAP FOR CALAVERAS COUNTY, CALIFORNIA, DATED MAY 16, 2017.
PANEL 362 OF 750, MAP No. 06009C0362F
19. THERE ARE OPEN SPACE/PUBLIC AREAS PROPOSED ON THIS PROJECT.
20. TOPOGRAPHIC MAPPING SHOWN HEREON IS COMPUTER GENERATED FROM SURVEYED GROUND ELEVATIONS.
21. THIS PROJECT DOES NOT LIE WITH 1000 FEET OF A MILITARY INSTALLATION OR BENEATH A FLIGHT PATH.
22. PROPOSED NEW ROADS WILL BE PRIVATE ROADS BUILT TO CALAVERAS COUNTY STANDARDS AS SHOWN BELOW. ALL MATERIALS WILL BE TO APPROVED CALAVERAS COUNTY STANDARDS. A PRIVATE ROAD EASEMENT AND ROAD MAINTENANCE AGREEMENT WILL BE ENTERED INTO.

BAJA LA CONTENTA DRIVE:	3418± LF	ROAD "A":	497± LF
BAJA LA CONTENTA COURT:	546± LF	ROAD "B":	366± LF
BAJA LA CONTENTA LANE:	105± LF	ROAD "C":	919± LF
		ROAD "D":	419± LF

23. LAND USE SUMMARY:

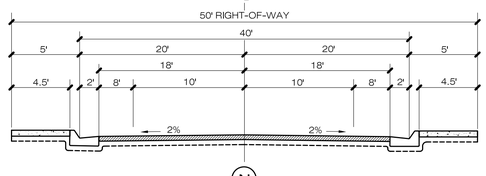
TOTAL SINGLE FAMILY LOTS:	49 LOTS	TOTAL TOWNHOUSE LOTS:	72 LOTS
SMALLEST SINGLE FAMILY LOT:	13,708 SF	SMALLEST TOWNHOUSE LOT:	2,820 SF
LARGEST SINGLE FAMILY LOT:	29,443 SF	LARGEST TOWNHOUSE LOT:	10,948 SF

LAND USE: LOTS - 30.22 ACRES (65.1%)
ROADS - 6.85 ACRES (14.7%)
OPEN SPACE - 9.36 ACRES (20.2%)

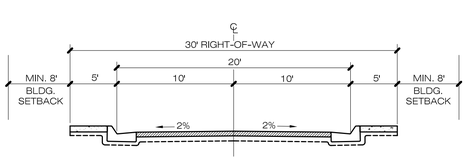
24. TOTAL DISTURBED AREA: 37.88 ACRES (81.6% OF SITE)
25. THE FOLLOWING EASEMENTS ARE NOTED IN PRELIMINARY REPORT ORDER No. _____ PREPARED BY _____ TITLE COMPANY AND DATED _____, 2020 AS AFFECTING THIS PROPERTY (SEE SAID PRELIMINARY REPORT FOR COMPLETE LIST OF EXCEPTIONS):

DEED REF	DESC
DEED REF	DESC
DEED REF	DESC
DEED REF	DESC

PUBLIC OR PRIVATE ROAD
COMMUNITY



RESIDENTIAL ROAD (PARKING BOTH SIDES)
NOT TO SCALE



MULTI-FAMILY PRIVATE ROAD
NOT TO SCALE

REVISIONS	BY

TOMA & ASSOCIATES INC.
ENGINEERING - SURVEYING - PLANNING
41 Summit Street, Jackson, CA 95642
(209) 223-0156

VESTING TENTATIVE
SUBDIVISION MAP No. 2011-035
HOGAN OAKS UNIT 2
BEING PARCEL 8 PER PM 2-146
ALSO BEING A PORTION OF THE NE 1/4 SECTION 25, T. 4 N., R. 10 E., M. D. M.
CALAVERAS COUNTY, CALIFORNIA

SITE INFORMATION:
NO SITE ADDRESS ASSIGNED
VALLEY SPRINGS, CA 95252

PREPARED FOR:
OLD GOLDEN OAKS, LLC
ATTN: RYAN VOORHEES
801 BRIARWOOD STREET
WEATHERFORD, TX 76087

(209) 367-1706 OFFICE
(209) 329-5133 MOBILE

DATE: 11.03.2020
SCALE: 1"= 100'
DRAWN BY: GMW
JOB NO.: 1905-11
SHEET 1 OF 1 SHEET

Agenda Item

DATE: January 12, 2021

TO: Engineering Committee, Calaveras County Water District
Michael Minkler, General Manager

FROM: Damon Wyckoff, Director of Operations

RE: Review of Proposed Amendments to the 2020/21 Fiscal Year's Capital Improvement Program Project List

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SUMMARY

Unexpected failures, unanticipated increases in facility deterioration, and plans to secure project funding have resulted in a change to the short-term objectives within the 2020/21 Fiscal Year (FY) Capital Improvement Program (CIP).

The Vallecito Wastewater Treatment Plant (Val WWTP) has experienced extreme difficulty in filtering wastewater. Operations Staff have expended a considerable amount of overtime in recent months working to improve filterability and have had limited to little success. Fats, Oils, and Grease (FOG) and grit continue to restrict the permeability of the Membrane Bio-reactor (MBR) Filter Plates. Filtrate headers are a continual source of entrained air resulting in filtrate vacuum fouling and the system's fine screen continues to allow the passage of toothpicks, Q-Tips, etc. through the process to negatively impact the filter plates. The Val WWTP needs immediate improvements to address these issues. Resolution will result in a reduction in Field Staff overtime, an improved process, and finished product.

The Forest Meadows Wastewater Treatment Plant's (FM WWTP) UV Disinfection System is past its useful life. The unit was installed in December of 1999. The System continues to experience electrical and process control failures that result in a reduction in effective filtered wastewater disinfection and an increase in overtime. The unit is currently slated to be replaced next fiscal year (2021/22), but in consideration of the Regulatory Requirements associated with the unit's critical role in effective wastewater disinfection, the number of system failures, and amount of overtime incurred in addressing those failures, Staff feel it prudent to move the planned replacement up into the current fiscal year and work toward replacing the unit now.

Within the current CIP the District has a project that intends to address the diminished operation of the tertiary filter at the Copper Cove Wastewater

Reclamation Plant. The project is titled “Reclamation Plant Filter Rehab” and has $230K allocated for FY 20/21. Concurrently, the District is working with proponents in Washington to secure Federal funding to replace this tertiary filter. To optimize the District’s ability to make site improvements while working to avoid the implementation of two projects that work to meet the same objective, Staff propose to rename the Project titled “Reclamation Plant Filter Rehab” to “Reclamation Plant Improvements” and reduce its allocation from $230K to $100K. This will allow the District to work to improve the system operation without confounding the objectives of CCWD Representatives in Washington working to secure funding for wholesale filter replacement. The $130K pulled from the project would then be used to fund the aforementioned improvements to the Vallecito WWTP.

Given that all three systems continue to experience unprecedented failures, work must be done to restore their operation to as normal as possible in short order. Completion of these proposed amendments will in-turn eliminate any possible confusion associated with the District’s work in Washington to obtain Federal funding for tertiary filter replacement while also budgeting for “Reclamation Filter Plant Rehab”.

Additionally, the current CIP includes $330K this fiscal year for the rehabilitation of three of the six filters at the Jenny Lind Water Treatment Plant (JL WTP) and an additional $330K to complete the work in fiscal year 2021/22. It is Staff’s objective to have this work completed within the current fiscal year. As a result, Staff would like to move funds allocated for filter rehab at the JL WTP in fiscal year 2021/22 into the current 2020/21 fiscal year.

And finally, the District currently has $100K allocated in the fiscal year 2020/21 labelled “Wallace Renovations/SCADA/PLC and Electrical”. This line item needs to be adjusted in order to fully fund the work effort. Staff requests the dollar amount be amended to $160k to adequately fund the successful bid of $124K and cover the associated internal Engineering Department work efforts.

FINANCIAL CONSIDERATIONS

The proposed amendments would move $300K currently allocated in the FY 21/22 Wastewater CIP up to the current 20/21 FY CIP budget for UV Disinfection System replacement in Forest Meadows and change the name of the Project titled, “Reclamation Plant Filter Rehab” to “Reclamation Plant Improvements”, reduce its funding from $230K to $100K, and use the $130K removed from the Project to provide the budget for a new Project entitled “Vallecito WWTP System Improvements” (see attachments). It would also increase the funding of the “Wallace Renovation /SCADA/PLC & Electrical” from $100K to $160K.

The proposed amendments would also move $330K currently allocated in the FY 21/22 Water CIP up to the current 20/21 FY CIP budget to facilitate the effective planned rehabilitation of Filters 3, 4, and 5 at the JL WTP (see attachments).

Concurrence from the Engineering Committee for this course of action will be important when the Director of Administrative Services provides the proposed amendment to the full CCWD Board of Directors in Mid-Year Budget Review.

Attachments: Current and Proposed Amended FY 20/21 CIP

Capital Improvement Program
Schedule of Cash Flow - Water Projects
FY 2020-21 thru FY 2022-2023-Current

Project No	Water Projects Project Description	2020/21 Proposed Project	Cash Flow			Funding FY 20-21					Future Funding					Total Funding				
			FY 20-21	FY 21-22	FY 22-23	Expansion Funds	Reserves	Capital R & R	Grants	AD / Other Outside	Expansion Funds	Reserves	Capital R & R	Grants	AD / Other Outside	Expansion Funds	Reserves	Capital R & R	Grants	AD / Other Outside
11096	AMR/AMI Radio Read Meter Program	6,112,000	2,000,000	2,000,000	1,999,091	-	-	-	2,000,000	-	-	-	-	3,999,091	-	-	-	-	5,999,091	-
11117	Avery Pumps / Motor Control Soft Starts	60,000	60,000				-	60,000								-	-	60,000	-	-
11108	Big Trees Pump Stations 1, 4 & 5 Replacement	860,000	10,000	-	75,000			10,000					849,893			-	-	859,893	-	-
11113	Copper Cove SCADA Improvements	60,000	60,000			-	-	60,000	-	-	-	-	-	-	-	-	-	60,000	-	-
11083C	Copper Cove Tank B /Clearwell (11079/11080)	1,171,000	10,000	150,000	1,000,115	-	-	10,000	-	-	-	-	1,150,115	-	-	-	-	1,160,115	-	-
11111	Copper Cove Tank B Pump Station Renovation	910,000	10,000	150,000	749,893			10,000					899,893			-	-	909,893	-	-
11122	Copper Cove Zone B-C Trans Pipeline & Pump Stations	9,010,000	10,000	-		-	-	10,000	-	-	-	-	9,000,000	-	-	-	-	9,010,000	-	-
11101	District Corp Yard	600,000	300,000	150,000	150,000	-	300,000									-	300,000	-	-	-
11098	Ebbetts Pass Hunters WTP Filter Rehab	480,000	23,500	-		-	-	23,500	-	-	-	-	-	-	-	-	-	23,500	-	-
11115	Ebbetts Pass Larkspur Pump Station Rehab / Electrical	300,000	300,000			-	-	300,000	-	-	-	-	-	-	-	-	-	300,000	-	-
11099	Ebbetts Pass Meadowmont Pump Station / Rehab.	234,000	149,831	-		-	-	149,831								-	-	149,831	-	-
11116	Ebbetts Pass Pinebrook Rehabilitation	400,000	-			-	-	-	-	-	-	-	400,000	-	-	-	-	400,000	-	-
11085	Ebbetts Pass Reach 1 Water Line Replacement	8,353,000	3,499,679			875,000	-	2,624,679	-	-	-	-	-	-	-	875,000	-	2,624,679	-	-
11095	Ebbetts Pass Redwood Tanks HMGP	3,038,000	500,000	1,200,000	1,299,584	-	-	125,000	375,000	-	-	-	624,896	1,874,688	-	-	-	749,896	2,249,688	-
11083S	Ebbetts Pass Sawmill Tank / Repair & Paint	1,510,000	-	-	300,000	-	-	-	-	-	-	-	1,499,655	-	-	-	-	1,499,655	-	-
11084	Ebbetts Pass Techite Water Line Replacement	2,463,000	1,950,000	100,000		-	-	1,950,000	-	-	-	-	100,000	-	-	-	-	2,050,000	-	-
11103	Hunters Raw Water Pumps Renovations	2,015,000	10,000	200,000	-			10,000					1,999,784	-		-	-	2,009,784	-	-
11066G	Jenny Lind (Kirby/Garner/Gabor) Service Lines	600,000	100,000			-	-	475,000	-	-	-	-	-	-	-	-	-	475,000	-	-
11083J	Jenny Lind Clearwell #2 / Repair & Paint	216,000		-		-	-	-	-	-	-	-	199,781	-	-	-	-	199,781	-	-
11118	Jenny Lind Filters 3, 4 & 5 Rehab / Coating	660,000	330,000	330,000		-	-	330,000	-	-	-	-	330,000	-	-	-	-	660,000	-	-
11120	Jenny Lind Raw Water Intake Structure	4,000,000	-			-	-	-	-	-	-	-	4,000,000	-	-	-	-	4,000,000	-	-
11088	Jenny Lind Tank A-B Transmission Line	5,513,000	500,000	3,000,000	1,999,584	125,000	-	375,000	-	-	-	-	4,999,584	-	-	125,000	-	5,374,584	-	-
11121	Jenny Lind Tank C Replacement	500,000	10,000			-	-	10,000	-	-	-	-	490,000	-	-	-	-	500,000	-	-
11119	Jenny Lind Tanks A, B, E & F Rehab	2,000,000	-			-		-	-	-	-	-	2,000,000	-	-	-	-	2,000,000	-	-
11092	Jenny Lind WTP PreTreatment Facility	5,067,000	39,940	-		-	-	9,985	29,955	-	-	-	-	-	-	-	-	9,985	29,955	-
11104	Lake Tulloch Submerged Water Line Crossing	3,500,000		200,000	200,000	-	-	-	-	-	-	-	3,500,000	-	-	-	-	3,500,000	-	-
11083L	Larkspur Tank / Repair & Paint	373,000	50,000	150,000	150,032	-	-	50,000	-	-	-	-	300,032	-	-	-	-	350,032	-	-
various	Misc Road Repairs / CalOES	257,655	257,655			-	16,120	-	241,548	-	-	-	-	-	-	-	16,120	-	241,548	-
11110	Reeds Turnpike Pump Station Replacement	350,000	50,000	299,786	-			20,000		30,000			299,786			-	-	319,786	-	30,000
11127	Sheep Ranch Clearwell Rehab/ Repair and Paint	350,000	-			-	-	-	-	-	-	-	350,000	-	-	-	-	350,000	-	-
11126	Sheep Ranch Distribution System Replacement	750,000	-			-	-	-	-	-	-	-	750,000	-	-	-	-	750,000	-	-
11125	Sheep Ranch Water Plant Replacement	800,000	-			-	-	-	-	-	-	-	800,000	-	-	-	-	800,000	-	-
10029	Slurry Line Improvements	80,000	80,000			-	-	-		80,000	-	-	-	-	-	-	-	-	-	80,000
11100	Wallace SCADA System Improvements	101,000	-		40,000	-	-	-	-	-			99,690			-	-	99,690	-	-
11083W	Wallace Tanks / Repair & Paint	456,000			50,000	-	-	-	-	-	-	-	449,386	-	-	-	-	449,386	-	-
11123	West Point Acorn Pump Station & Trans Pipeline	2,010,000	10,000			-	-	10,000	-	-	-	-	2,000,000	-	-	-	-	2,010,000	-	-
11106	West Point Backup Water Filter	2,000,000	500,000	500,000	999,566	-	-	500,000	-	-	-	-	1,499,566	-	-	-	-	1,999,566	-	-
11124	West Point Middle Fork Pump Station	1,610,000	10,000			-	-	10,000	-	-	-	-	1,600,000	-	-	-	-	1,610,000	-	-
11107	West Point SCADA Improvements	110,000	10,000	-	40,000	-	-	10,000	-	-	-	-	99,566	-	-	-	-	109,566	-	-
11112	White Pines Dam/Blanket Drain Rehab	65,000	65,000		-			100,000								-	-	100,000	-	-
	Total Water Projects	**$ 68,944,655**	**$ 10,905,605**	**$ 8,429,786**	**$ 9,052,865**	**$ 1,000,000**	**$ 316,120**	**$ 7,242,995**	**$ 2,646,503**	**$ 110,000**	**$ -**	**$ -**	**$ 40,291,627**	**$ 5,873,779**	**$ -**	**$ 1,000,000**	**$ 316,120**	**$ 47,534,622**	**$ 8,520,282**	**$ 110,000**
11128	Service Line Replacement Project - to address the County's Microsurfacing Plan for 2021	468,000	468,000	-	-	-	-	468,000.00	-	-	-	-	-	-	-	-	-	468,000	-	-
10072	Bow Water Main Replacement	60,000	60,000	-	-	-	-	60,000.00	-	-	-	-	-	-	-	-	-	60,000	-	-
11114	Turbidimeter/Analyzer Replacement Project est 30 turbs	100,100	100,100	-	-	-	-	100,100.00	-	-	-	-	-	-	-	-	-	100,100	-	-
	Total Non-CIP Water Projects	**$ 628,100**	**$ 628,100**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 628,100**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	-	-	**628,100**	-	-
	TOTAL WATER PROJECTS	**$ 69,572,755**	**$ 11,533,705**	**$ 8,429,786**	**$ 9,052,865**	**$ 1,000,000**	**$ 316,120**	**$ 7,871,095**	**$ 2,646,503**	**$ 110,000**	**$ -**	**$ -**	**$ 40,291,627**	**$ 5,873,779**	**$ -**	**$ 1,000,000**	**$ 316,120**	**$ 48,162,722**	**$ 8,520,282**	**$ 110,000**

Capital Improvement Program
Schedule of Cash Flow - Water Projects
FY 2020-21 thru FY 2022-2023-**Proposed**

Project No	Water Projects Project Description	2020/21 Proposed Project	Cash Flow			Funding FY 20-21					Future Funding					Total Funding				
			FY 20-21	FY 21-22	FY 22-23	Expansion Funds	Reserves	Capital R & R	Grants	AD / Other Outside	Expansion Funds	Reserves	Capital R & R	Grants	AD / Other Outside	Expansion Funds	Reserves	Capital R & R	Grants	AD / Other Outside
11096	AMR/AMI Radio Read Meter Program	6,112,000	2,000,000	2,000,000	1,999,091	-	-	-	2,000,000	-	-	-	-	3,999,091	-	-	-	-	5,999,091	-
11117	Avery Pumps / Motor Control Soft Starts	60,000	60,000				-	60,000								-	-	60,000	-	-
11108	Big Trees Pump Stations 1, 4 & 5 Replacement	860,000	10,000	-	75,000			10,000					849,893			-	-	859,893	-	-
11113	Copper Cove SCADA Improvements	60,000	60,000			-	-	60,000	-	-	-	-	-	-	-	-	-	60,000	-	-
11083C	Copper Cove Tank B /Clearwell (11079/11080)	1,171,000	10,000	150,000	1,000,115	-	-	10,000	-	-	-	-	1,150,115	-	-	-	-	1,160,115	-	-
11111	Copper Cove Tank B Pump Station Renovation	910,000	10,000	150,000	749,893			10,000					899,893			-	-	909,893	-	-
11122	Copper Cove Zone B-C Trans Pipeline & Pump Stations	9,010,000	10,000	-		-	-	10,000	-	-	-	-	9,000,000	-	-	-	-	9,010,000	-	-
11101	District Corp Yard	600,000	300,000	150,000	150,000	-	300,000									-	300,000	-	-	-
11098	Ebbetts Pass Hunters WTP Filter Rehab	480,000	23,500	-		-	-	23,500	-	-	-	-	-	-	-	-	-	23,500	-	-
11115	Ebbetts Pass Larkspur Pump Station Rehab / Electrical	300,000	300,000			-	-	300,000	-	-	-	-	-	-	-	-	-	300,000	-	-
11099	Ebbetts Pass Meadowmont Pump Station / Rehab.	234,000	149,831	-		-	-	149,831								-	-	149,831	-	-
11116	Ebbetts Pass Pinebrook Rehabilitation	400,000	-			-	-	-	-	-	-	-	400,000	-	-	-	-	400,000	-	-
11085	Ebbetts Pass Reach 1 Water Line Replacement	8,353,000	3,499,679			875,000	-	2,624,679	-	-	-	-	-	-	-	875,000	-	2,624,679	-	-
11095	Ebbetts Pass Redwood Tanks HMGP	3,038,000	500,000	1,200,000	1,299,584	-	-	125,000	375,000	-	-	-	624,896	1,874,688	-	-	-	749,896	2,249,688	-
11083S	Ebbetts Pass Sawmill Tank / Repair & Paint	1,510,000	-	-	300,000	-	-	-	-	-	-	-	1,499,655	-	-	-	-	1,499,655	-	-
11084	Ebbetts Pass Techite Water Line Replacement	2,463,000	1,950,000	100,000		-	-	1,950,000	-	-	-	-	100,000	-	-	-	-	2,050,000	-	-
11103	Hunters Raw Water Pumps Renovations	2,015,000	10,000	200,000	-			10,000					1,999,784	-		-	-	2,009,784	-	-
11066G	Jenny Lind (Kirby/Garner/Gabor) Service Lines	600,000	100,000			-	-	475,000	-	-	-	-	-	-	-	-	-	475,000	-	-
11083J	Jenny Lind Clearwell #2 / Repair & Paint	216,000		-		-	-	-	-	-	-	-	199,781	-	-	-	-	199,781	-	-
11118	Jenny Lind Filters 3, 4 & 5 Rehab / Coating	660,000	660,000			-	-	330,000	-	-	-	-	330,000	-	-	-	-	660,000	-	-
11120	Jenny Lind Raw Water Intake Structure	4,000,000	-			-	-	-	-	-	-	-	4,000,000	-	-	-	-	4,000,000	-	-
11088	Jenny Lind Tank A-B Transmission Line	5,513,000	500,000	3,000,000	1,999,584	125,000	-	375,000	-	-	-	-	4,999,584	-	-	125,000	-	5,374,584	-	-
11121	Jenny Lind Tank C Replacement	500,000	10,000			-	-	10,000	-	-	-	-	490,000	-	-	-	-	500,000	-	-
11119	Jenny Lind Tanks A, B, E & F Rehab	2,000,000	-			-		-	-	-	-	-	2,000,000	-	-	-	-	2,000,000	-	-
11092	Jenny Lind WTP PreTreatment Facility	5,067,000	39,940	-		-	-	9,985	29,955	-	-	-	-	-	-	-	-	9,985	29,955	-
11104	Lake Tulloch Submerged Water Line Crossing	3,500,000		200,000	200,000	-	-	-	-	-	-	-	3,500,000	-	-	-	-	3,500,000	-	-
11083L	Larkspur Tank / Repair & Paint	373,000	50,000	150,000	150,032	-	-	50,000	-	-	-	-	300,032	-	-	-	-	350,032	-	-
various	Misc Road Repairs / CalOES	257,655	257,655			-	16,120	-	241,548	-	-	-	-	-	-	-	16,120	-	241,548	-
11110	Reeds Turnpike Pump Station Replacement	350,000	50,000	299,786	-			20,000		30,000			299,786			-	-	319,786	-	30,000
11127	Sheep Ranch Clearwell Rehab/ Repair and Paint	350,000	-			-	-	-	-	-	-	-	350,000	-	-	-	-	350,000	-	-
11126	Sheep Ranch Distribution System Replacement	750,000	-			-	-	-	-	-	-	-	750,000	-	-	-	-	750,000	-	-
11125	Sheep Ranch Water Plant Replacement	800,000	-			-	-	-	-	-	-	-	800,000	-	-	-	-	800,000	-	-
10029	Slurry Line Improvements	80,000	80,000			-	-	-		80,000	-	-	-	-	-	-	-	-	-	80,000
11100	Wallace SCADA System Improvements	101,000	-		40,000	-	-	-	-	-			99,690			-	-	99,690	-	-
11083W	Wallace Tanks / Repair & Paint	456,000			50,000	-	-	-	-	-	-	-	449,386	-	-	-	-	449,386	-	-
11123	West Point Acorn Pump Station & Trans Pipeline	2,010,000	10,000			-	-	10,000	-	-	-	-	2,000,000	-	-	-	-	2,010,000	-	-
11106	West Point Backup Water Filter	2,000,000	500,000	500,000	999,566	-	-	500,000	-	-	-	-	1,499,566	-	-	-	-	1,999,566	-	-
11124	West Point Middle Fork Pump Station	1,610,000	10,000			-	-	10,000	-	-	-	-	1,600,000	-	-	-	-	1,610,000	-	-
11107	West Point SCADA Improvements	110,000	10,000	-	40,000	-	-	10,000	-	-	-	-	99,566	-	-	-	-	109,566	-	-
11112	White Pines Dam/Blanket Drain Rehab	65,000	65,000		-			100,000								-	-	100,000	-	-
	Total Water Projects	**$ 68,944,655**	**$ 11,235,605**	**$ 8,099,786**	**$ 9,052,865**	**$ 1,000,000**	**$ 316,120**	**$ 7,242,995**	**$ 2,646,503**	**$ 110,000**	**$ -**	**$ -**	**$ 40,291,627**	**$ 5,873,779**	**$ -**	**$ 1,000,000**	**$ 316,120**	**$ 47,534,622**	**$ 8,520,282**	**$ 110,000**
11128	Service Line Replacement Project - to address the County's Microsurfacing Plan for 2021	468,000	468,000	-	-	-	-	468,000.00	-	-	-	-	-	-	-	-	-	468,000	-	-
10072	Bow Water Main Replacement	60,000	60,000	-	-	-	-	60,000.00	-	-	-	-	-	-	-	-	-	60,000	-	-
11114	Turbidimeter/Analyzer Replacement Project est 30 turbs	100,100	100,100	-	-	-	-	100,100.00	-	-	-	-	-	-	-	-	-	100,100	-	-
	Total Non-CIP Water Projects	**$ 628,100**	**$ 628,100**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 628,100**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**628,100**	**$ -**	**$ -**
	TOTAL WATER PROJECTS	**$ 69,572,755**	**$ 11,863,705**	**$ 8,099,786**	**$ 9,052,865**	**$ 1,000,000**	**$ 316,120**	**$ 7,871,095**	**$ 2,646,503**	**$ 110,000**	**$ -**	**$ -**	**$ 40,291,627**	**$ 5,873,779**	**$ -**	**$ 1,000,000**	**$ 316,120**	**$ 48,162,722**	**$ 8,520,282**	**$ 110,000**

Capital Improvement Program
Schedule of Cash Flow - Wastewater Projects
FY 2020-21 thru 2022-23-Current

Project No	*Wastewater Projects Project Description*	Total Project Cost	Cash Flow			Funding FY 20-21					Future Funding					Total Funding				
			FY 20-21	FY 21-22	FY 22-23	Expansion Funds	Reserves	Capital R & R	Grants	AD / Other Outside	Expansion Funds	Reserves	Capital R & R	Grants	AD / Other Outside	Expansion Funds	Reserves	Capital R & R	Grants	AD / Other Outside
15096	Arnold Leach Field Improvements	702,000	100,000	300,000	300,000	20,000	-	80,000	-	-		-	600,000	-	-	20,000	-	680,000	-	-
15095	Arnold Secondary Clarifier	2,010,000	500,000	750,000	750,000	100,000	-	400,000	-	-		-	1,500,000	-	-	100,000	-	1,900,000	-	-
15080	CC Lift Station 15 & 18 Rehab/Replacement	2,656,000	300,000	1,100,000	1,100,000	-	-	300,000	-	-	-	-	2,200,000	-	-	-	-	2,500,000	-	-
15076	CC Lift Station 6, 8 & Force Main Bypass	3,652,000	500,000	1,500,000	1,500,000	-	-	500,000	-	-	-	-	3,000,000	-	-	-	-	3,500,000	-	-
15094	CC Secondary,Tertiary & UV Improvements	13,016,000	200,000	800,000	2,000,000	100,000	-	100,000	-	-		-	12,800,000	-	-	100,000	-	12,900,000	-	-
15109	Collection System Rehab and I&I Mitigation	150,000		-		-	-		-	-	-	-	150,000	-	-	-	-	150,000	-	-
15103	Effluent Storage Tank Rehab	250,000	25,000	100,000	125,000			25,000					225,000			-	-	250,000	-	-
15099	Headworks Screen Projects	275,000	275,000	-		-	-	275,000	-	-	-	-	-	-	-	-	-	275,000	-	-
15092	Huckleberry Lift Station Rehab	480,000	65,000	-		-	-	65,000	-	-	-	-	-	-	-	-	-	65,000	-	-
15098	Indian Rock East Sand Filter Rehab	200,000	200,000	-		-	-	200,000	-	-	-	-	-	-	-	-	-	200,000	-	-
15101	La Contenta Spray Fields	200,000	200,000					200,000								-	-	200,000	-	-
15097	LC Biolac, Clarifier & UV Improvements	4,000,000	-	300,000	300,000	-	-	-	-	-		-	4,000,000	-	-	-	-	4,000,000	-	-
15104	Lift Station 2 & 3 Improvements	1,000,000			250,000								1,000,000			-	-	1,000,000	-	-
15105	Reclamation Plant Filter Rehab	230,000	230,000					230,000								-	-	230,000	-	-
15108	Regional Biosolids/Sludge Handling	1,500,000											1,500,000			-	-	1,500,000	-	-
15110	Sequoia Woods Leach Field Rehab	150,000	-	-		-	-	-	-	-	-	-	150,000	-	-	-	-	150,000	-	-
15107	Sludge Tank & Belt Press Improvements	50,000	50,000					50,000								-	-	50,000	-	-
15093	Southworth Collection System / I&I Mitigation	150,000	50,000	-		-	-	50,000	-	-	-	-	-	-	-	-	-	50,000	-	-
15102	Tertiary Filter Rehab	250,000	25,000	100,000	125,000			25,000					225,000			-	-	250,000	-	-
15106	UV Disinfection System Replacement	300,000		300,000									300,000			-	-	300,000	-	-
15082	Vallecito Recycled Water Distribution Project	280,000		-		-	-			-	-	-			-	-	-	-	-	-
15087/10033	Wallace Renovation/SCADA/PLC & Electrical	124,000	100,000	-		-	-	-	-	100,000	-	-	-	-		-	-	-	-	100,000
15091	West Point/Wilseyville Consolidation Project	4,757,000	450,000	2,150,000	2,150,000	-	-	450,000	-	-	-	-	4,300,000	-	-	-	-	4,750,000	-	-
	Total Wastewater Projects	**$ 36,382,000**	**$ 3,270,000**	**$ 7,400,000**	**$ 8,600,000**	**$ 220,000**	**$ -**	**$ 2,950,000**	**$ -**	**$ 100,000**	**$ -**	**$ -**	**$ 31,950,000**	**$ -**	**$ -**	**$ 220,000**	**$ -**	**$ 34,900,000**	**$ -**	**$ 100,000**
11114	Turbidimeter/Analyzer replacement project	11,000	11,000	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15100	Lift Station Pump and motor replacements (10)	100,000	100,000	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total Non-CIP Wastewater Projects	**$ 111,000**	**$ 111,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
TOTAL WASTEWATER PROJECTS		**$ 36,493,000**	**$ 3,381,000**	**$ 7,400,000**	**$ 8,600,000**	**$ 220,000**	**$ -**	**$ 2,950,000**	**$ -**	**$ 100,000**	**$ -**	**$ -**	**$ 31,950,000**	**$ -**	**$ -**	**$ 220,000**	**$ -**	**$ 34,900,000**	**$ -**	**$ 100,000**

Capital Improvement Program
Schedule of Cash Flow - Wastewater Projects
FY 2020-21 thru 2022-23-**Proposed**

Project No	*Wastewater Projects Project Description*	Total Project Cost	Cash Flow			Funding FY 20-21					Future Funding					Total Funding				
			FY 20-21	FY 21-22	FY 22-23	Expansion Funds	Reserves	Capital R & R	Grants	AD / Other Outside	Expansion Funds	Reserves	Capital R & R	Grants	AD / Other Outside	Expansion Funds	Reserves	Capital R & R	Grants	AD / Other Outside
15096	Arnold Leach Field Improvements	702,000	100,000	300,000	300,000	20,000	-	80,000	-	-		-	600,000	-	-	20,000	-	680,000	-	-
15095	Arnold Secondary Clarifier	2,010,000	500,000	750,000	750,000	100,000	-	400,000	-	-		-	1,500,000	-	-	100,000	-	1,900,000	-	-
15080	CC Lift Station 15 & 18 Rehab/Replacement	2,656,000	300,000	1,100,000	1,100,000	-	-	300,000	-	-	-	-	2,200,000	-	-	-	-	2,500,000	-	-
15076	CC Lift Station 6, 8 & Force Main Bypass	3,652,000	500,000	1,500,000	1,500,000	-	-	500,000	-	-	-	-	3,000,000	-	-	-	-	3,500,000	-	-
15094	CC Secondary,Tertiary & UV Improvements	13,016,000	200,000	800,000	2,000,000	100,000	-	100,000	-	-		-	12,800,000	-	-	100,000	-	12,900,000	-	-
15109	Collection System Rehab and I&I Mitigation	150,000		-		-	-		-	-	-	-	150,000	-	-	-	-	150,000	-	-
15103	Effluent Storage Tank Rehab	250,000	25,000	100,000	125,000			25,000					225,000			-	-	250,000	-	-
15099	Headworks Screen Projects	275,000	275,000	-		-	-	275,000	-	-	-	-	-	-	-	-	-	275,000	-	-
15092	Huckleberry Lift Station Rehab	480,000	65,000	-		-	-	65,000	-	-	-	-	-	-	-	-	-	65,000	-	-
15098	Indian Rock East Sand Filter Rehab	200,000	200,000	-		-	-	200,000	-	-	-	-	-	-	-	-	-	200,000	-	-
15101	La Contenta Spray Fields	200,000	200,000					200,000								-	-	200,000	-	-
15097	LC Biolac, Clarifier & UV Improvements	4,000,000	-	300,000	300,000	-	-	-	-	-		-	4,000,000	-	-	-	-	4,000,000	-	-
15104	Lift Station 2 & 3 Improvements	1,000,000			250,000								1,000,000			-	-	1,000,000	-	-
15105	**Reclamation Plant Improvements**	100,000	100,000					100,000								-	-	100,000	-	-
15108	Regional Biosolids/Sludge Handling	1,500,000											1,500,000			-	-	1,500,000	-	-
15110	Sequoia Woods Leach Field Rehab	150,000	-	-		-	-	-	-	-	-	-	150,000	-	-	-	-	150,000	-	-
15107	Sludge Tank & Belt Press Improvements	50,000	50,000					50,000								-	-	50,000	-	-
15093	Southworth Collection System / I&I Mitigation	150,000	50,000	-		-	-	50,000	-	-	-	-	-	-	-	-	-	50,000	-	-
15102	Tertiary Filter Rehab	250,000	25,000	100,000	125,000			25,000					225,000			-	-	250,000	-	-
15106	**UV Disinfection System Replacement**	300,000	300,000										300,000			-	-	300,000	-	-
	Vallecito WWTP System Improvements	130,000	130,000																	
15082	Vallecito Recycled Water Distribution Project	280,000		-		-	-			-	-	-			-	-	-	-	-	-
15087/10033	**Wallace Renovation/SCADA/PLC & Electrical**	160,000	160,000	-		-	-	-	-	124,000	-	-	-	-		-	-	-	-	124,000
15091	West Point/Wilseyville Consolidation Project	4,757,000	450,000	2,150,000	2,150,000	-	-	450,000	-	-	-	-	4,300,000	-	-	-	-	4,750,000	-	-
	Total Wastewater Projects	**$ 36,418,000**	**$ 3,630,000**	**$ 7,100,000**	**$ 8,600,000**	**$ 220,000**	**$ -**	**$ 2,820,000**	**$ -**	**$ 124,000**	**$ -**	**$ -**	**$ 31,950,000**	**$ -**	**$ -**	**$ 220,000**	**$ -**	**$ 34,770,000**	**$ -**	**$ 124,000**
11114	Turbidimeter/Analyzer replacement project	11,000	11,000	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15100	Lift Station Pump and motor replacements (10)	100,000	100,000	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total Non-CIP Wastewater Projects	**$ 111,000**	**$ 111,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
TOTAL WASTEWATER PROJECTS		**$ 36,529,000**	**$ 3,741,000**	**$ 7,100,000**	**$ 8,600,000**	**$ 220,000**	**$ -**	**$ 2,820,000**	**$ -**	**$ 124,000**	**$ -**	**$ -**	**$ 31,950,000**	**$ -**	**$ -**	**$ 220,000**	**$ -**	**$ 34,770,000**	**$ -**	**$ 124,000**